

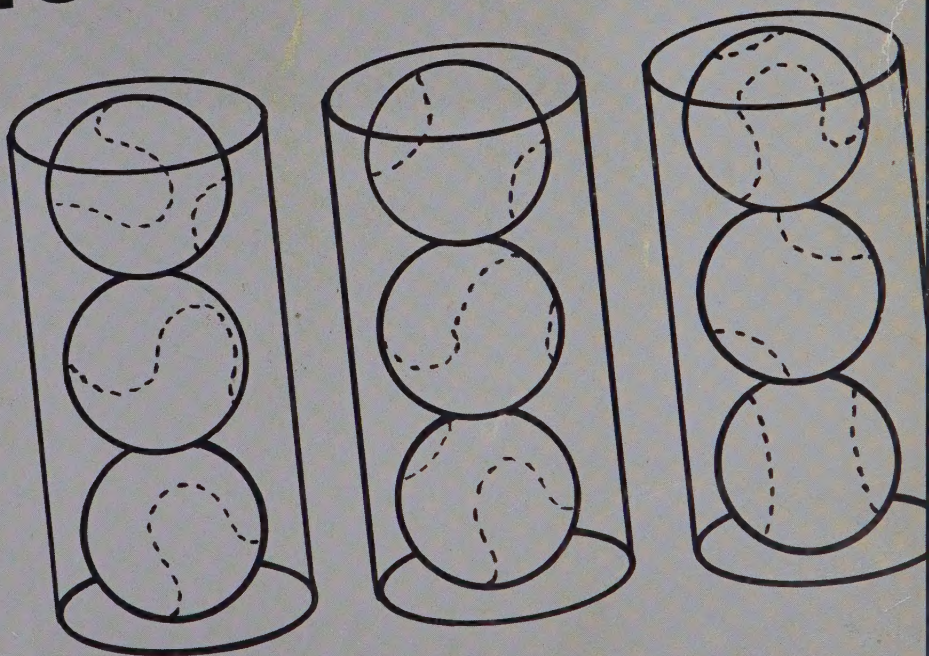


# starting points in mathematics

# 4

## Workbook

4. 3 tennis balls to a can  
How many cans of  
tennis balls?

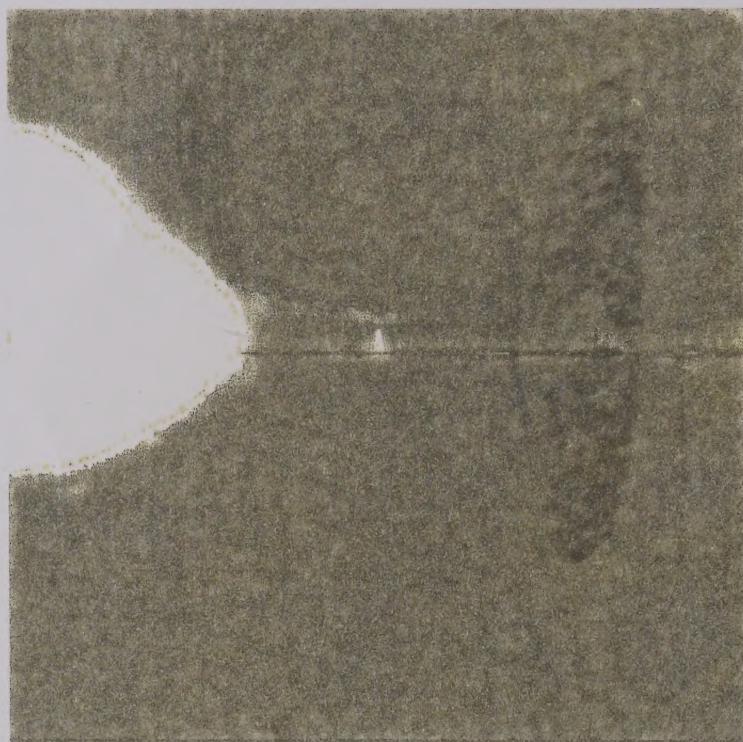


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Workbook for

**starting points  
in mathematics**

Level 4

**GINN AND COMPANY**  
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**Numbers to 999**

Write the standard form for each.

hundreds	tens	ones
2	8	6

hundreds	tens	ones
3	0	9

hundreds	tens	ones
5	3	2

4. nine hundred four

5. four hundred seventy

6. eight hundred nineteen

What does the 6 mean in each numeral?

7. 651 6 hundreds

8. 867

9. 346

Write the standard form for each.

hundreds	tens	ones
7	1	5

hundreds	tens	ones
8	9	7

hundreds	tens	ones
5	2	7

13. three hundred six

14. six hundred twenty-eight

15. two hundred thirty

What does the 8 mean in each numeral?

16. 180

17. 823

18. 628

**Numbers to 9999**

Write the standard form for each.

th	h	t	o
1	7	3	5

th	h	t	o
4	0	5	9

3. one thousand four hundred ten

4. two thousand sixty-eight

What does the 5 mean in each numeral?

5. 7514 5 hundreds

6. 5920

7. 6852

Write the standard form for each.

th	h	t	o
3	4	8	2

th	h	t	o
2	1	0	6

10. four thousand nine hundred one

11. six thousand seventy

12. three thousand sixty-three

13. five thousand five hundred twenty

What does the 7 mean in each numeral?

14. 6071

15. 7352

16. 4751

17. 9837



**Expanded Form**

Write the expanded form for each.

1. 2641  $2000 + 600 + 40 + 1$

2. 3406  $3000 +$

3. 8567

Write the standard form for each.

4.  $5000 + 400 + 9$

5.  $7000 + 40 + 8$

6.  $9000 + 100 + 70$

Write the expanded form for each.

7. 1982

8. 3460

9. 6057

10. 5103

11. 3005

12. 4649

Write the standard form for each.

13.  $4000 + 50 + 7$

14.  $6000 + 200 + 8$

15.  $3000 + 80$

16.  $8000 + 300 + 60 + 7$

17.  $7000 + 200 + 40$

18.  $9000 + 100 + 30 + 8$

SPM4/U1/12-13

**Comparing and Ordering Numbers**Use  $>$  or  $<$  to make a true statement.

1. 5346  $>$  5254

2. 6457  $>$  6257

3. 7756  $>$  7765

List from least to greatest.

4. 6434, 4634, 4463, 6443  
 $4463, 4634, 6434, 6443$

5. 1620, 1062, 1602, 1026  
 $1026,$

6. 7544, 7464, 7458, 7446

Use  $>$  or  $<$  to make a true statement.

7. 6767  $>$  6677

8. 8201  $>$  8210

9. 7936  $>$  7846

10. 9102  $>$  9101

11. 4001  $>$  4010

12. 4477  $>$  4747

List from least to greatest.

13. 8798, 8788, 8797, 8897

14. 5795, 5579, 5600, 5759

15. 3124, 1344, 3144, 3142

16. 8608, 8606, 8060, 6806

17. 2522, 2552, 255, 2525

18. 6090, 6900, 6099, 6009



## Rounding

Round to the nearest ten.

1. 24 *20*2. 57 *60*3. 82 *80*4. 45 *50*

Round to the nearest hundred.

5. 562 *600*6. 712 *700*7. 393 *400*8. 250 *300*

Round to the nearest thousand.

9. 8300 *8000*10. 1829 *2000*11. 7362 *7000*12. 1500 *2000*

Round to the nearest ten.

13. 18

14. 84

15. 315

16. 197

Round to the nearest hundred.

17. 381

18. 693

19. 2449

20. 1486

Round to the nearest thousand.

21. 8300

22. 1721

23. 5500

24. 2932

SPM4/U1/16-17

## Ordinal Numbers

Write using numerals.

1. six hundred fourth *604<sup>th</sup>*2. four hundred sixtieth *460<sup>th</sup>*3. eight hundred twenty-first *821<sup>st</sup>*

Write the words.

4. 291<sup>st</sup>*two hundred ninety-first*5. 313<sup>th</sup>6. 829<sup>th</sup>

Write using numerals.

7. three hundred twentieth

8. nine hundred sixty-sixth

9. four hundred thirty-eighth

10. two hundred twelfth

11. five hundred seventy-second

12. one hundred third

Write the words.

13. 945<sup>th</sup> *nine hundred forty fifth*14. 818<sup>th</sup> *eight hundred eighteen*15. 190<sup>th</sup>16. 501<sup>st</sup>



## Numbers to 999 999

Write the standard form.

1. 83 thousand 526 83 526

2. 399 thousand 15

3. sixty thousand six hundred five 60 605

4. seven hundred twenty thousand

5. 400 000 + 20 000 + 400 420 400

6. 70 000 + 3 000 + 20 + 8

7. 118 thousand

8. 42 thousand 51

9. 262 thousand 110

10. five hundred eight thousand ten

11. two hundred thousand five

12. 100 000 + 6 000 + 200 + 5

13. 60 000 + 40 + 8

Write the words.

14. 32 800

15. 703 075

What does the 7 mean in each numeral?

16. 127 614

17. 816 719

18. 790 414

## Comparing and Ordering Numbers

Use > or < to make a true statement.

1. 527 533 > 527 244

2. 612 667 \_\_\_\_ 621 242

3. 64 259 \_\_\_\_ 62 999

List from greatest to least.

4. 486 433, 48 888, 489 433, 499 433  
499 433, 489 433, 486 433, 48 888

5. 84 829, 92 848, 94 809, 94 049

Use > or < to make a true statement.

6. 968 753 \_\_\_\_ 896 537

7. 699 705 \_\_\_\_ 698 999

8. 854 499 \_\_\_\_ 855 899

9. 56 889 \_\_\_\_ 54 899

10. 576 616 \_\_\_\_ 576 529

11. 471 222 \_\_\_\_ 417 777

List from greatest to least.

12. 45 678, 46 578, 46 875, 46 857

13. 91 222, 912 022, 91 021, 91 212

14. 164 578, 16 475, 160 758, 164 597

15. 328 634, 326 684, 328 464, 328 636



**Practice**

Think of a place-value chart to help you answer these questions.

1. What does the 6 mean in 8654? *600*      2. What does the 3 mean in 43 806? *3000*  
3. What does the 5 mean in 526 062? *500 000*      4. What does the 9 mean in 293 568? *9000*

Write the standard form.

5. four hundred twenty-nine thousand one hundred sixty *429160*  
6. seven hundred eight thousand *7800*      7. 2 thousands 3 tens 4 ones  
8.  $300\,000 + 5\,000 + 70 + 5$       9. 70 thousand 58

Write the expanded form.

10. 20 560      11. 709 300

Write the words.

12. 38 380  
13. 470 074

Use  $>$  or  $<$  to make true statements.

14. 1918  $\underline{\hspace{1cm}}$  1891      15. 73 450  $\underline{\hspace{1cm}}$  73 054      16. 735 537  $\underline{\hspace{1cm}}$  753 357

List from least to greatest.

17. 2338, 2383, 2838, 2333      18. 140 705, 14 750, 14 075, 14 705

List from greatest to least.

19. 4636, 4463, 4626, 4632      20. 769 649, 796 497, 790 904, 796 967

Round to the nearest ten.

21. 67      22. 3652      23. 495

Round to the nearest hundred.

24. 815      25. 2748      26. 49 350

Round to the nearest thousand.

27. 7600      28. 14 450      29. 260 725



Roman Numerals

Write the standard form.

1. IX    9
2. XVI
3. XXIV

Write the Roman numeral.

4. 50    L
5. 94    xc
6. 59

Write the standard form.


7. XLV
8. VIII
9. XIII
10. LIX
11. LXXI
12. XC
13. LXXXVI
14. XXXVIII
15. LII
16. XCIX
17. XLVII
18. LXIV

Write the Roman numeral.


19. 14
20. 29
21. 49
22. 56
23. 67
24. 78
25. 85
26. 9

Fractions for Part of a Whole


Write a fraction to show how much is shaded.


1. 


$\frac{1}{2}$


2. 

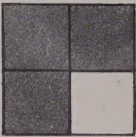
$\frac{1}{4}$


3. 

4. 

5. 

6. 

7. 

8. 

For each fraction, draw a picture. Show equal parts. Then shade to show the fraction.

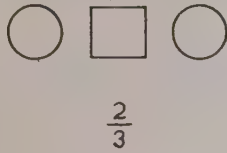
9.  $\frac{7}{10}$
10.  $\frac{3}{5}$
11.  $\frac{2}{4}$
12.  $\frac{4}{5}$
13.  $\frac{1}{2}$
14.  $\frac{2}{5}$
15.  $\frac{2}{3}$
16.  $\frac{3}{10}$



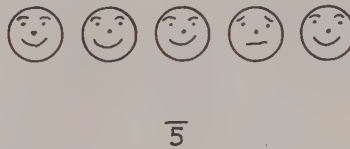
## Fractions for Part of a Set

Write a fraction to answer the question.

1. What fraction of the shapes are circles?



2. What fraction of the faces are smiling?



3. What fraction of the clowns have no hats?



4. What fraction of the bulbs are lit?



5. What fraction of the flowers have stems?



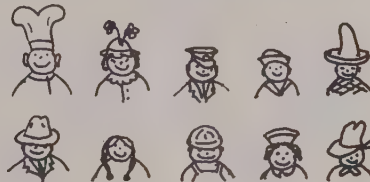
6. What fraction of the apples have leaves?



7. What fraction of the switches are "on"?



8. What fraction of the people have hats?



9. What fraction of the swings have children?



Draw a picture to show the fraction.

10. a group of faces,  
 $\frac{2}{3}$  of which are happy

11. a group of stems,  
 $\frac{3}{5}$  of which have flowers

12. a group of eggs,  
 $\frac{1}{4}$  of which are cracked

13. a group of sticks,  
 $\frac{7}{10}$  of which are straight

14. a group of people,  
 $\frac{1}{2}$  of whom wear glasses

15. a group of shapes,  
 $\frac{3}{5}$  of which are squares



# Fractions Greater Than 1

Write a fraction to answer the question.

1. How many apples?



$$3\frac{1}{2}$$

2. How many pairs of skates?

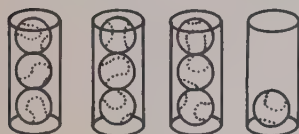


$$2\frac{1}{2}$$

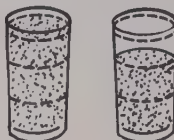
3. 10 cookies to a box.  
How many boxes of cookies?



4. 3 tennis balls to a can.  
How many cans of tennis balls?



5. How many glasses of juice?



6. 5 pens to a box.  
How many boxes of pens?



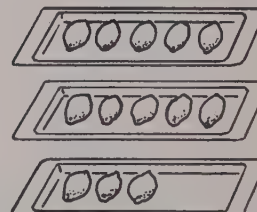
7. How many oranges?



8. 4 quarters to a stack.  
How many stacks of quarters?



9. 5 limes to a tray.  
How many trays of limes?



Draw a picture to show the amount.

10.  $1\frac{1}{2}$  pairs of sneakers

11.  $2\frac{1}{4}$  sandwiches

12. 10 markers to a box

$$5\frac{3}{10} \text{ boxes}$$

13.  $2\frac{2}{3}$  bananas

14.  $1\frac{4}{5}$  barrels  
of rainwater

15. 4 players to a team.  
 $3\frac{3}{4}$  teams



NAME \_\_\_\_\_

## Addition - Skills Warmup

Add.

$$\begin{array}{r} 1. \ 2 \\ \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \ 6 \\ \ 0 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \ 1 \\ \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \ 4 \\ \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \ 3 \\ \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \ 0 \\ \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \ 9 \\ \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \ 5 \\ \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \ 8 \\ \ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \ 7 \\ \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \ 7 \\ \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \ 3 \\ \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \ 4 \\ \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \ 5 \\ \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \ 8 \\ \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 16. \ 6 \\ \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 17. \ 9 \\ \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 18. \ 8 \\ \ 5 \\ \hline \end{array}$$

$$19. \ 7 + 6$$

$$20. \ 8 + 2$$

$$21. \ 9 + 8$$

$$22. \ 6 + 5$$

$$23. \ 4 + 9$$

$$24. \ 8 + 7$$

$$25. \ 9 + 6$$

$$26. \ 4 + 8$$

## Subtraction - Skills Warmup

Subtract.

$$\begin{array}{r} 1. \ 8 \\ \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \ 6 \\ \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \ 4 \\ \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \ 3 \\ \ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \ 9 \\ \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \ 3 \\ \ 0 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \ 13 \\ \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \ 11 \\ \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \ 15 \\ \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \ 18 \\ \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \ 12 \\ \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \ 11 \\ \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \ 10 \\ \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \ 10 \\ \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \ 12 \\ \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 16. \ 14 \\ \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 17. \ 17 \\ \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 18. \ 11 \\ \ 8 \\ \hline \end{array}$$

$$19. \ 10 - 4$$

$$20. \ 13 - 6$$

$$21. \ 14 - 7$$

$$22. \ 16 - 9$$

$$23. \ 15 - 6$$

$$24. \ 13 - 5$$

$$25. \ 12 - 7$$

$$26. \ 14 - 6$$



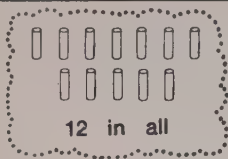
NAME \_\_\_\_\_

SPM4/U2/32-33

### Addition, Basic Facts

Add.

1. 
$$\begin{array}{r} 7 \\ + 5 \\ \hline 12 \end{array}$$



2. 
$$\begin{array}{r} 3 \\ + 8 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 8 \\ + 7 \\ \hline \end{array}$$

4.  $2 + 5$

5.  $7 + 9$



6. 
$$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 2 \\ + 7 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} 8 \\ + 9 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 6 \\ + 8 \\ \hline \end{array}$$

11. 
$$\begin{array}{r} 7 \\ + 3 \\ \hline \end{array}$$

12. 
$$\begin{array}{r} 4 \\ + 9 \\ \hline \end{array}$$

13. 
$$\begin{array}{r} 8 \\ + 8 \\ \hline \end{array}$$

14. 
$$\begin{array}{r} 9 \\ + 6 \\ \hline \end{array}$$

15. 
$$\begin{array}{r} 7 \\ + 6 \\ \hline \end{array}$$

16. 
$$\begin{array}{r} 6 \\ + 5 \\ \hline \end{array}$$

17. 
$$\begin{array}{r} 4 \\ + 8 \\ \hline \end{array}$$

18.  $3 + 6$

19.  $4 + 4$

20.  $8 + 5$

21.  $2 + 9$

22.  $7 + 7$

23.  $8 + 2$

24.  $0 + 9$

25.  $9 + 5$

SPM4/U2/34-35

### Addition, Regrouping Ones

Add.

1. 
$$\begin{array}{r} 1 \\ 45 \\ + 37 \\ \hline 82 \end{array}$$

2. 
$$\begin{array}{r} 1 \\ 24 \\ + 69 \\ \hline 93 \end{array}$$

3. 
$$\begin{array}{r} 18 \\ + 62 \\ \hline \end{array}$$

4.  $26 + 36$

5. 
$$\begin{array}{r} 58 \\ + 23 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 49 \\ + 35 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 65 \\ + 28 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 26 \\ + 45 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} 47 \\ + 26 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 55 \\ + 36 \\ \hline \end{array}$$

11. 
$$\begin{array}{r} 16 \\ + 49 \\ \hline \end{array}$$

12. 
$$\begin{array}{r} 48 \\ + 47 \\ \hline \end{array}$$

13. 
$$\begin{array}{r} 34 \\ + 18 \\ \hline \end{array}$$

14. 
$$\begin{array}{r} 33 \\ + 19 \\ \hline \end{array}$$

15.  $45 + 49$

16.  $22 + 19$

17.  $37 + 38$

18.  $57 + 34$



**Addition, Regrouping Ones, Tens, or Hundreds**

Add.

1. $\begin{array}{r} \overset{1}{2}71 \\ 356 \\ \hline 627 \end{array}$	2. $\begin{array}{r} \overset{1}{1}65 \\ 329 \\ \hline 4 \end{array}$	3. $\begin{array}{r} 325 \\ 84 \\ \hline \end{array}$	4. $\begin{array}{r} 2854 \\ 138 \\ \hline \end{array}$	5. $\begin{array}{r} 4824 \\ 1964 \\ \hline \end{array}$
---	---	---	---	--

6.  $\begin{array}{r} 363 \\ 254 \\ \hline \end{array}$

7.  $\begin{array}{r} 457 \\ 72 \\ \hline \end{array}$

8.  $\begin{array}{r} 1537 \\ 59 \\ \hline \end{array}$

9.  $\begin{array}{r} 436 \\ 236 \\ \hline \end{array}$

10.  $\begin{array}{r} 2612 \\ 2871 \\ \hline \end{array}$

11.  $\begin{array}{r} 181 \\ 175 \\ \hline \end{array}$

12.  $\begin{array}{r} 6941 \\ 1234 \\ \hline \end{array}$

13.  $\begin{array}{r} 377 \\ 181 \\ \hline \end{array}$

14.  $\begin{array}{r} 228 \\ 455 \\ \hline \end{array}$

15.  $\begin{array}{r} 416 \\ 243 \\ \hline \end{array}$

16.  $\begin{array}{r} 5320 \\ 1879 \\ \hline \end{array}$

17.  $\begin{array}{r} 6053 \\ 2082 \\ \hline \end{array}$

18.  $\begin{array}{r} 129 \\ 146 \\ \hline \end{array}$

19.  $\begin{array}{r} 5024 \\ 2759 \\ \hline \end{array}$

20.  $\begin{array}{r} 1490 \\ 2193 \\ \hline \end{array}$

**Addition, Two or More Regroupings**

Add.

1. $\begin{array}{r} \overset{1}{4}398 \\ 2567 \\ \hline 6965 \end{array}$	2. $\begin{array}{r} \overset{1}{3}528 \\ 4739 \\ \hline 7 \end{array}$	3. $\begin{array}{r} 8437 \\ 1167 \\ \hline \end{array}$	4. $1629 + 2578$
--	---	--	------------------

5.  $\begin{array}{r} 1525 \\ 4482 \\ \hline \end{array}$

6.  $\begin{array}{r} 3289 \\ 3669 \\ \hline \end{array}$

7.  $\begin{array}{r} 2637 \\ 5628 \\ \hline \end{array}$

8.  $\begin{array}{r} 1574 \\ 1564 \\ \hline \end{array}$

9.  $\begin{array}{r} 2149 \\ 1785 \\ \hline \end{array}$

10.  $\begin{array}{r} 3648 \\ 1475 \\ \hline \end{array}$

11.  $\begin{array}{r} 2468 \\ 2098 \\ \hline \end{array}$

12.  $\begin{array}{r} 5645 \\ 1839 \\ \hline \end{array}$

13.  $\begin{array}{r} 6784 \\ 2549 \\ \hline \end{array}$

14.  $\begin{array}{r} 218 \\ 493 \\ \hline \end{array}$

15.  $187 + 5629$

16.  $5576 + 2647$

17.  $3932 + 1489$

**Practice**

Add.

1. 
$$\begin{array}{r} 7 \\ 9 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 56 \\ 31 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 438 \\ 120 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 23 \\ 74 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 23 \\ 59 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 164 \\ 72 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 636 \\ 2612 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 1459 \\ 1713 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} 456 \\ 761 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 0 \\ 7 \\ \hline \end{array}$$

11.  $754 + 878$

12.  $803 + 519$

13.  $1486 + 819$

14.  $8416 + 792$

15.  $697 + 3178$

16.  $2705 + 486$

Solve. Show your work.

17. In an experiment, one beetle trap caught 78 beetles. Another caught 93. How many beetles did the two traps catch?

18. The car show had 9 new models and 8 antiques. How many cars were in the show?

19. Calgary sent 103 persons to the convention. Edmonton sent 98. Together, how many did the two cities send?

20. 367 of the train passengers were going to Halifax. 195 were going to Dartmouth. How many were going to the two cities in all?

21. The farm produced 2875 muskmelons and 4195 honeydew melons. How many melons did it produce in all?

22. The farmer sold the wheat crop for \$3550 and the oat crop for \$5875. For how much did the farmer sell the two crops in all?



## Adding Three Numbers

Add.

1. $\begin{array}{r} 211 \\ 812 \\ 3564 \\ 2934 \\ \hline 7310 \end{array}$	2. $\begin{array}{r} 1 \\ 618 \\ 5074 \\ 973 \\ \hline 5 \end{array}$	3. $\begin{array}{r} 4238 \\ 1934 \\ \hline 829 \end{array}$	4. $379 + 4649 + 321$
---	---	--	-----------------------

5. $\begin{array}{r} 758 \\ 6433 \\ \hline 524 \end{array}$	6. $\begin{array}{r} 5276 \\ 204 \\ \hline 2985 \end{array}$	7. $\begin{array}{r} 4321 \\ 226 \\ \hline 1357 \end{array}$	8. $\begin{array}{r} 3819 \\ 1257 \\ \hline 4515 \end{array}$	9. $\begin{array}{r} 7682 \\ 1205 \\ \hline 627 \end{array}$
10. $\begin{array}{r} 352 \\ 2258 \\ \hline 2481 \end{array}$	11. $\begin{array}{r} 961 \\ 4282 \\ \hline 2118 \end{array}$	12. $\begin{array}{r} 3249 \\ 1143 \\ \hline 2668 \end{array}$	13. $\begin{array}{r} 698 \\ 715 \\ \hline 2947 \end{array}$	14. $\begin{array}{r} 4645 \\ 321 \\ \hline 736 \end{array}$

15.  $357 + 6086 + 34$

16.  $348 + 2858 + 4571$

## Practice

Solve. Show your work.

- The farmer baled hay in three fields. One field gave 755 bales of hay. Another gave 862 bales. The third gave 516 bales. How many bales were there in all?
- The counter on one turnstile showed 485. On the other turnstile, the counter showed 752. How many is this in all?
- The car-carrier carried one car of 980 kg, another of 1084 kg, and a third of 1116 kg. How heavy were the three cars in all?
- In one day, the livestock broker bought 2000 cattle, 3500 hogs, and 700 sheep. How many head of livestock did the broker buy that day?

## Estimating the Sum

First round and add to estimate the sum. Then find the exact sum.

<p>1. <math>\begin{array}{r} 8256 \\ 572 \\ 538 \\ \hline 9366 \end{array}</math> <span style="border: 1px dashed black; border-radius: 50%; padding: 2px;">Estimate first.</span></p> <p><math>8256 \rightarrow 8300</math>  <math>572 \rightarrow 600</math>  <math>538 \rightarrow 500</math>  <math>\underline{9366} \quad \underline{9400}</math></p> <p><span style="border: 1px dashed black; border-radius: 50%; padding: 2px;">Then add.</span></p>	<p>2. <math>\begin{array}{r} 1568 \\ 2895 \\ 1427 \\ \hline \end{array}</math> <span style="border: 1px dashed black; border-radius: 50%; padding: 2px;">Estimate first.</span></p> <p><math>1568 \rightarrow 2000</math>  <math>2895 \rightarrow 3000</math>  <math>1427 \rightarrow 1000</math></p> <p><span style="border: 1px dashed black; border-radius: 50%; padding: 2px;">Then add.</span></p>	<p>3. <math>6789 + 362 + 801</math></p>
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4.  $\begin{array}{r} 4378 \\ 645 \\ \hline 706 \end{array}$

5.  $\begin{array}{r} 3859 \\ 734 \\ \hline 89 \end{array}$

6.  $\begin{array}{r} \$2334 \\ 4258 \\ \hline 1769 \end{array}$

7.  $\begin{array}{r} 493 \\ 858 \\ \hline 2105 \end{array}$

8.  $\begin{array}{r} 3044 \\ 277 \\ \hline 4086 \end{array}$

9.  $\begin{array}{r} \$813 \\ 732 \\ \hline 660 \end{array}$

10.  $\begin{array}{r} 1600 \\ 398 \\ \hline 574 \end{array}$

11.  $\begin{array}{r} 7156 \\ 550 \\ \hline 1232 \end{array}$

12.  $\begin{array}{r} \$2330 \\ 1895 \\ \hline 2916 \end{array}$

13.  $2789 + 752 + 903$

14.  $824 + 778 + 624$

15.  $2321 + 512 + 167$

16.  $178 + 256 + 538$

17.  $109 + 378 + 325$

18.  $4025 + 1616 + 1396$



**Practice**

Add.

$$\begin{array}{r} 1. \ 45 \\ \underline{34} \end{array}$$

$$\begin{array}{r} 2. \ 36 \\ \underline{52} \end{array}$$

$$\begin{array}{r} 3. \ 314 \\ \underline{73} \end{array}$$

$$\begin{array}{r} 4. \ 182 \\ \underline{615} \end{array}$$

$$\begin{array}{r} 5. \ 2427 \\ \underline{1521} \end{array}$$

$$\begin{array}{r} 6. \ 34 \\ \underline{27} \end{array}$$

$$\begin{array}{r} 7. \ 18 \\ \underline{24} \end{array}$$

$$\begin{array}{r} 8. \ 532 \\ \underline{328} \end{array}$$

$$\begin{array}{r} 9. \ 139 \\ \underline{44} \end{array}$$

$$\begin{array}{r} 10. \ 605 \\ \underline{179} \end{array}$$

$$\begin{array}{r} 11. \ 484 \\ \underline{62} \end{array}$$

$$\begin{array}{r} 12. \ 463 \\ \underline{463} \end{array}$$

$$\begin{array}{r} 13. \ 2907 \\ \underline{1342} \end{array}$$

$$\begin{array}{r} 14. \ 3231 \\ \underline{1688} \end{array}$$

$$\begin{array}{r} 15. \ 1826 \\ \underline{5333} \end{array}$$

$$\begin{array}{r} 16. \ 569 \\ \underline{257} \end{array}$$

$$\begin{array}{r} 17. \ 195 \\ \underline{426} \end{array}$$

$$\begin{array}{r} 18. \ 173 \\ \underline{389} \end{array}$$

$$\begin{array}{r} 19. \ 2144 \\ \underline{916} \end{array}$$

$$\begin{array}{r} 20. \ 3280 \\ \underline{3728} \end{array}$$

$$\begin{array}{r} 21. \ 6066 \\ \underline{594} \end{array}$$

$$\begin{array}{r} 22. \ 2479 \\ \underline{2851} \end{array}$$

$$\begin{array}{r} 23. \ 5739 \\ \underline{2468} \end{array}$$

$$\begin{array}{r} 24. \ 5927 \\ \underline{1593} \end{array}$$

$$\begin{array}{r} 25. \ 4836 \\ \underline{2878} \end{array}$$

$$\begin{array}{r} 26. \ 34 \\ 69 \\ \underline{22} \end{array}$$

$$\begin{array}{r} 27. \ 357 \\ 28 \\ \underline{180} \end{array}$$

$$\begin{array}{r} 28. \ 457 \\ 246 \\ \underline{68} \end{array}$$

$$\begin{array}{r} 29. \ 4185 \\ 389 \\ \underline{465} \end{array}$$

$$\begin{array}{r} 30. \ 1587 \\ 3909 \\ \underline{2568} \end{array}$$

Solve. Show your work.

31. Mr. Griggs paid \$3585 for a used car and \$5578 for a used truck. How much did he pay in all?

32. In the video game, Shirley had scores of 2850, 3980, and 3730. What was her total score?

33. The newstand sold 148 copies of the Sun and 195 copies of the Star. How many papers did it sell in all?


34. The mail room processed 576 envelopes and 67 packages one day. How many items did it process in all?

NAME \_\_\_\_\_

SPM4/U3/52-53

# Subtraction, Basic Facts

Subtract.

<p>1. <math>\begin{array}{r} 15 \\ - 7 \\ \hline 8 \end{array}</math></p> 	<p>2. <math>\begin{array}{r} 11 \\ - 5 \\ \hline \end{array}</math></p>	<p>3. <math>\begin{array}{r} 12 \\ - 8 \\ \hline \end{array}</math></p>	<p>4. <math>12 - 5</math></p> <p>5. <math>10 - 7</math></p>
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○○○○○-○○○○○-○○○○○-○○○

- |   |  |  |  |  |  |
|---|--|--|--|--|--|
| 6. $\begin{array}{r} 8 \\ - 3 \\ \hline \end{array}$  | 7. $\begin{array}{r} 10 \\ - 1 \\ \hline \end{array}$  | 8. $\begin{array}{r} 13 \\ - 6 \\ \hline \end{array}$  | 9. $\begin{array}{r} 17 \\ - 8 \\ \hline \end{array}$  | 10. $\begin{array}{r} 16 \\ - 9 \\ \hline \end{array}$ | 11. $\begin{array}{r} 18 \\ - 9 \\ \hline \end{array}$ |
| 12. $\begin{array}{r} 8 \\ - 6 \\ \hline \end{array}$ | 13. $\begin{array}{r} 12 \\ - 3 \\ \hline \end{array}$ | 14. $\begin{array}{r} 12 \\ - 6 \\ \hline \end{array}$ | 15. $\begin{array}{r} 13 \\ - 9 \\ \hline \end{array}$ | 16. $\begin{array}{r} 14 \\ - 5 \\ \hline \end{array}$ | 17. $\begin{array}{r} 14 \\ - 8 \\ \hline \end{array}$ |
| 18. $9 - 6$   | 19. $11 - 7$   | 20. $16 - 8$   | 21. $10 - 4$   |  |  |
| 22. $13 - 8$  | 23. $10 - 5$   | 24. $11 - 8$   | 25. $15 - 9$   |  |  |

SPM4/U3/54-55

# Subtraction, Regrouping Tens

Subtract.

<p>1. <math>\begin{array}{r} 71 \\ - 80 \\ \hline 27 \\ 59 \end{array}</math></p>	<p>2. <math>\begin{array}{r} 618 \\ - 78 \\ \hline 49 \end{array}</math></p>	<p>3. <math>\begin{array}{r} 57 \\ - 38 \\ \hline \end{array}</math></p>	<p>4. <math>\begin{array}{r} 60 \\ - 29 \\ \hline \end{array}</math></p>	<p>5. <math>84 - 17</math></p>
---	--	--	--	--------------------------------

- |   |   |   |   |   |
|---|---|---|---|---|
| 6. $\begin{array}{r} 80 \\ - 38 \\ \hline \end{array}$  | 7. $\begin{array}{r} 82 \\ - 57 \\ \hline \end{array}$  | 8. $\begin{array}{r} 71 \\ - 25 \\ \hline \end{array}$  | 9. $\begin{array}{r} 52 \\ - 14 \\ \hline \end{array}$  | 10. $\begin{array}{r} 60 \\ - 33 \\ \hline \end{array}$ |
| 11. $\begin{array}{r} 81 \\ - 49 \\ \hline \end{array}$ | 12. $\begin{array}{r} 58 \\ - 42 \\ \hline \end{array}$ | 13. $\begin{array}{r} 73 \\ - 34 \\ \hline \end{array}$ | 14. $\begin{array}{r} 55 \\ - 27 \\ \hline \end{array}$ | 15. $\begin{array}{r} 93 \\ - 45 \\ \hline \end{array}$ |
| 16. $42 - 29$   | 17. $91 - 34$   | 18. $81 - 68$   |   |   |



## Subtraction, Regrouping Tens, Hundreds, or Thousands

Subtract.

1. $\begin{array}{r} \overset{6}{7} \overset{13}{358} \\ \underline{3616} \\ 3742 \end{array}$	2. $\begin{array}{r} \overset{4}{4} \overset{13}{37} \\ \underline{2046} \\ 1 \end{array}$	3. $\begin{array}{r} 6449 \\ \underline{2731} \end{array}$	4. $\begin{array}{r} 865 \\ \underline{372} \end{array}$	5. $\begin{array}{r} 7066 \\ \underline{5242} \end{array}$
--	--	--	--	--

$$\begin{array}{r} 6. 350 \\ \underline{135} \end{array}$$

$$\begin{array}{r} 7. 3618 \\ \underline{241} \end{array}$$

$$\begin{array}{r} 8. 8273 \\ \underline{7312} \end{array}$$

$$\begin{array}{r} 9. 7094 \\ \underline{6721} \end{array}$$

$$\begin{array}{r} 10. 349 \\ \underline{153} \end{array}$$

$$\begin{array}{r} 11. 7855 \\ \underline{583} \end{array}$$

$$\begin{array}{r} 12. 991 \\ \underline{736} \end{array}$$

$$\begin{array}{r} 13. 6228 \\ \underline{4907} \end{array}$$

$$\begin{array}{r} 14. 5939 \\ \underline{5489} \end{array}$$

$$\begin{array}{r} 15. 5041 \\ \underline{2440} \end{array}$$

## Subtraction, Two or More Regroupings

Subtract.

1. $\begin{array}{r} \overset{11}{2} \overset{12}{2} \overset{16}{36} \\ \underline{468} \\ 2768 \end{array}$	2. $\begin{array}{r} \overset{6}{6} \overset{18}{783} \\ \underline{4892} \\ 1 \end{array}$	3. $\begin{array}{r} 6474 \\ \underline{3546} \end{array}$	4. $\begin{array}{r} 8246 \\ \underline{6169} \end{array}$	5. $\begin{array}{r} 6180 \\ \underline{1284} \end{array}$
---	---	--	--	--

$$\begin{array}{r} 6. 1060 \\ \underline{729} \end{array}$$

$$\begin{array}{r} 7. 9616 \\ \underline{3852} \end{array}$$

$$\begin{array}{r} 8. 8382 \\ \underline{5934} \end{array}$$

$$\begin{array}{r} 9. 877 \\ \underline{298} \end{array}$$

$$\begin{array}{r} 10. \$1420 \\ \underline{175} \end{array}$$

$$\begin{array}{r} 11. 9221 \\ \underline{689} \end{array}$$

$$\begin{array}{r} 12. 5347 \\ \underline{574} \end{array}$$

$$\begin{array}{r} 13. 5374 \\ \underline{3538} \end{array}$$

$$\begin{array}{r} 14. 5642 \\ \underline{1773} \end{array}$$

$$\begin{array}{r} 15. \$9408 \\ \underline{1432} \end{array}$$

$$\begin{array}{r} 16. 8495 \\ \underline{1956} \end{array}$$

$$\begin{array}{r} 17. 647 \\ \underline{589} \end{array}$$

$$\begin{array}{r} 18. 7263 \\ \underline{373} \end{array}$$

$$\begin{array}{r} 19. 7104 \\ \underline{1162} \end{array}$$

$$\begin{array}{r} 20. \$722 \\ \underline{527} \end{array}$$

**Practice**

Perform the indicated operation .

1. 
$$\begin{array}{r} 63 \\ -21 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 69 \\ +48 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 613 \\ -175 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} \$657 \\ +179 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 3406 \\ -1278 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 74 \\ 291 \\ +336 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 493 \\ -228 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 4112 \\ -1739 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} 305 \\ 621 \\ +717 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} \$148 \\ -79 \\ \hline \end{array}$$

11.  $2072 - 1865$

12.  $421 + 79 + 164$

13.  $\$227 - \$15$

14.  $300 - 163$

15.  $\$421 + \$43 + \$809$

16.  $7324 - 3865$

Solve. Show your work.

17. The base price for the new car is \$7350. Total cost for the extra features is \$2275. What is the price of the new car with the extra features?

18. Laurence filled the tank with 1350 L of water. During the night 285 L leaked out. How much was left?

19. The clinic treated 715 patients in November. Last November, it treated 478 patients. How many more patients were treated this November?

20. Marie-Louise saved \$135 last year and \$85 so far this year. She hopes to save \$90 more this year. If she does, how much will she have saved altogether?

21. The fishing boat brought in 1750 kg of fish. By nightfall 688 kg had been sold. How much remained?

22. The new census shows that the town has grown by a total of 568 people. It used to have 4777 people. Now how many does it have?



## Subtraction, Regrouping with Zeros

Subtract.

$\begin{array}{r} \overset{2\ 9\ 9\ 10}{1. \ 3000} \\ \underline{2863} \\ 137 \end{array}$	$\begin{array}{r} \overset{4\ 9\ 10}{2. \ 9500} \\ \underline{3298} \end{array}$	$\begin{array}{r} 3. \ 4000 \\ \underline{1374} \end{array}$	$\begin{array}{r} 4. \ 6030 \\ \underline{3165} \end{array}$	$\begin{array}{r} 5. \ \$7200 \\ \underline{426} \end{array}$
--	--	--	--	---

$$\begin{array}{r} 6. \ 6020 \\ \underline{2199} \end{array}$$

$$\begin{array}{r} 7. \ 1020 \\ \underline{586} \end{array}$$

$$\begin{array}{r} 8. \ 7000 \\ \underline{1032} \end{array}$$

$$\begin{array}{r} 9. \ 8101 \\ \underline{3717} \end{array}$$

$$\begin{array}{r} 10. \ \$904 \\ \underline{349} \end{array}$$

$$\begin{array}{r} 11. \ 8070 \\ \underline{5524} \end{array}$$

$$\begin{array}{r} 12. \ 8005 \\ \underline{4987} \end{array}$$

$$\begin{array}{r} 13. \ 502 \\ \underline{374} \end{array}$$

$$\begin{array}{r} 14. \ 9030 \\ \underline{5273} \end{array}$$

$$\begin{array}{r} 15. \ \$3050 \\ \underline{885} \end{array}$$

$$\begin{array}{r} 16. \ \$602 \\ \underline{405} \end{array}$$

$$\begin{array}{r} 17. \ 9201 \\ \underline{2365} \end{array}$$

$$\begin{array}{r} 18. \ 8000 \\ \underline{410} \end{array}$$

$$\begin{array}{r} 19. \ \$8013 \\ \underline{2987} \end{array}$$

$$\begin{array}{r} 20. \ \$6008 \\ \underline{516} \end{array}$$

## Practice

Solve. Show your work.

- Indira is sorting the slides she has taken on her travels. She has a total of 1200 slides. 480 of these are from India. How many others does she have?
- The Shoe Store receives a shipment of shoes. 160 pairs are for girls. 132 pairs are for boys. 88 pairs are for adults. How many pairs did The Shoe Store receive?
- The clinic checked 308 children for eye problems. 283 passed the test. How many showed eye problems?
- Mrs. Taylor bought a television set for \$273, a table for \$89, and a lamp for \$56. Altogether, how much did she spend?
- The bulb was supposed to burn for at least 2000 h. It burned out after 775 h of use. How many hours fewer than 2000 is this?
- Tuition for school is \$3000. Jed has already paid \$275. How much does he still owe?

## Using Addition to Check Subtraction

Subtract. Add to check.

$\begin{array}{r} \overset{12}{\cancel{8} \cancel{14}} \\ 578 \\ \hline 356 \end{array}$	$\begin{array}{r} \overset{11}{356} \\ 578 \\ \hline 934 \checkmark \end{array}$	$\begin{array}{r} \overset{310}{\cancel{405}} \\ 261 \\ \hline 4 \end{array}$	$\begin{array}{r} 3. \$661 \\ 475 \\ \hline \end{array}$	$\begin{array}{r} 4. 82 \\ 25 \\ \hline \end{array}$
--	--	---	--	--

$$\begin{array}{r} 5. 923 \\ 289 \\ \hline \end{array}$$

$$\begin{array}{r} 6. 77 \\ 31 \\ \hline \end{array}$$

$$\begin{array}{r} 7. 1036 \\ 581 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \$7393 \\ 4514 \\ \hline \end{array}$$

$$\begin{array}{r} 9. 601 \\ 269 \\ \hline \end{array}$$

$$\begin{array}{r} 10. 9000 \\ 6979 \\ \hline \end{array}$$

$$\begin{array}{r} 11. 867 \\ 354 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \$8685 \\ 7243 \\ \hline \end{array}$$

$$\begin{array}{r} 13. 921 \\ 23 \\ \hline \end{array}$$

$$\begin{array}{r} 14. 101 \\ 34 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \$5000 \\ 2825 \\ \hline \end{array}$$

$$\begin{array}{r} 16. 747 \\ 368 \\ \hline \end{array}$$

## Addition and Subtraction Together

Perform the indicated operations. Work inside the parentheses first.  
Show your work on other paper.

$$1. (732 - 345) + 232 \quad 619$$

$$\begin{array}{r} \overset{12}{\cancel{6} \cancel{12}} \\ \cancel{732} \\ - 345 \\ \hline 387 \end{array} \quad \begin{array}{r} \overset{1}{387} \\ + 232 \\ \hline 619 \end{array}$$

$$2. 732 - (345 + 232)$$

$$\begin{array}{r} 345 \\ + 232 \\ \hline \end{array}$$

$$3. (5845 - 4963) - 351$$

$$4. 5845 - (4963 + 351)$$

$$5. (723 - 622) + 42$$

$$6. 723 - (622 + 42)$$

$$7. 723 - (622 - 42)$$

$$8. 6946 - (4925 - 1147)$$

$$9. (6946 - 4925) - 1147$$

$$10. (6946 - 4925) + 1147$$



**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} 421 \\ + 187 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 703 \\ - 219 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} \$421 \\ 657 \\ + 273 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 650 \\ 729 \\ + 333 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 1700 \\ - 848 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 74 \\ + 86 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 2001 \\ - 485 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 8807 \\ + 994 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} 304 \\ - 37 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 101 \\ - 16 \\ \hline \end{array}$$

11.  $(27 - 13) + 51$

12.  $160 - (90 + 60)$

13.  $1495 + (2700 - 1895)$

14.  $\$451 + \$360 + \$83$

15.  $471 - (286 - 147)$

16.  $488 + 376 + 542$

Solve. Show your work.

17. Department A is allowed \$8000 for expenses. So far, it has spent \$3705. How much more can Department A spend?

19. Tahir collects precious gems. He has 178 rubies, 275 emeralds, and 315 opals. Altogether, how many gems does he have?

21. 2146 sheep on the ranch were rounded up for shearing. So far, only 750 have been shorn. How many are left to shear?

18. The large tank holds 2210 L of corn oil. The small tank holds 1745 L. In all, how much corn oil do the two tanks hold?

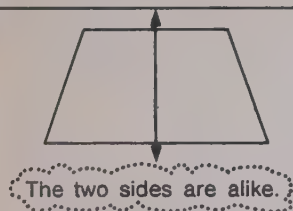
20. The town issued 304 dog licences this year. Last year, it issued 287. How many more did it issue this year?

22. The votes are in. There are 480 for Mr. Smith, 476 for Mr. Chen, and 509 for Mrs. Hindo. What is the total number of votes that were cast?

# Line Symmetry

Draw a line of symmetry.

1.



2.



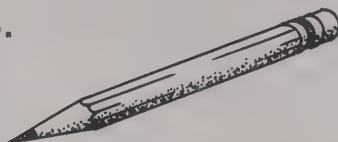
3.



4.



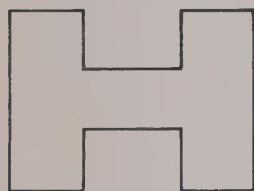
5.



6.



7.



8.



9.



SPM4/U4/76-77

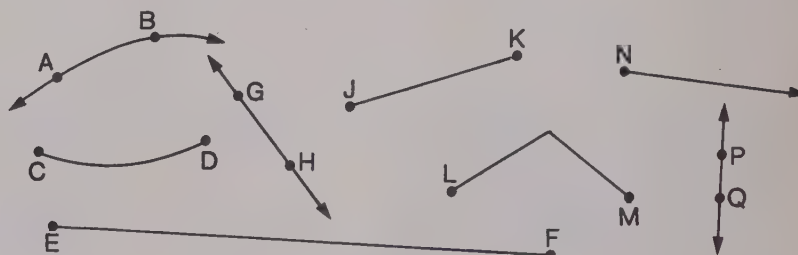
# Lines and Line Segments

Name \_\_\_\_\_

1. all the lines shown.

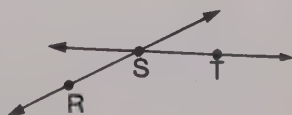
$\overleftrightarrow{GH}$ ,

2. all the line segments shown.

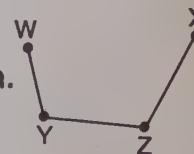


Name \_\_\_\_\_

3. all the lines shown.



4. all the line segments shown.



Draw and label

5.  $\overleftrightarrow{CN}$ .

6.  $\overline{AD}$ .

7. points P, Q, R, and  $\overleftrightarrow{PQ}$  and  $\overleftrightarrow{QR}$ .

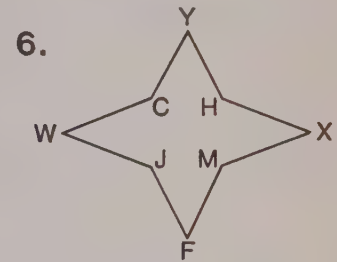
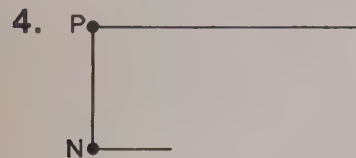
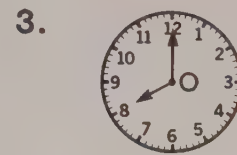
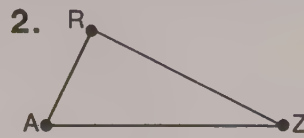
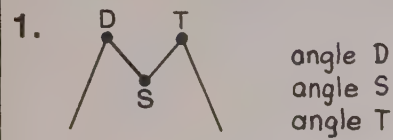
Print

8. your first name  
using only line segments.



## Angles

Name the angles suggested by each picture.



Draw and label these.

7. angle C smaller than a right angle

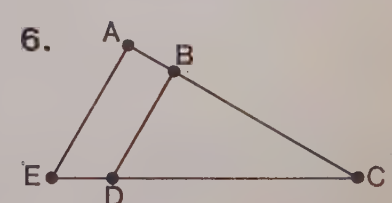
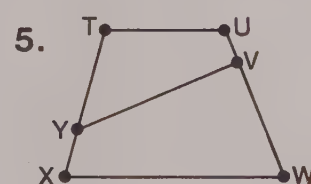
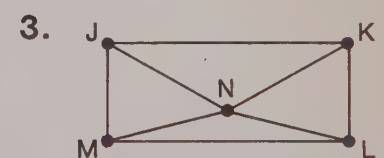
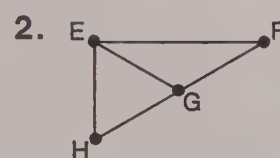
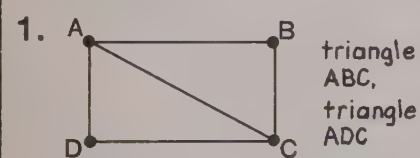
8. right angle B

9. angle A larger than a right angle

SPM4/U4/80-81

## Triangles

Name each triangle shown.



For the triangle shown,

7. name the angles.



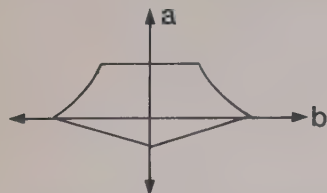
Draw and label

8. a triangle with sides LM and MN.

## Practice

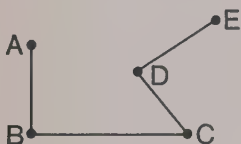
Which line is a line of symmetry?

1.



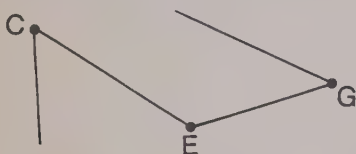
Name all the line segments shown.

3.



Name the angles suggested by this picture.

5.



Draw and label these.

7.  $\overleftrightarrow{CW}$

8. right angle Q

9.  $\overline{LN}$

10. triangle RST

11. angle P larger than a right angle.

12. angle X smaller than a right angle.

13. a triangle with angles D, E, and F.

Draw a picture for each of these.  
Show a line of symmetry.

14. a bicycle tire

15. a star

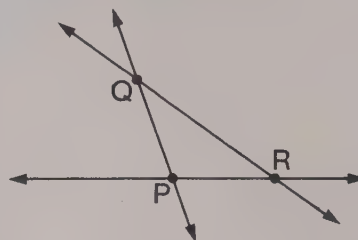
Draw a line of symmetry.

2.



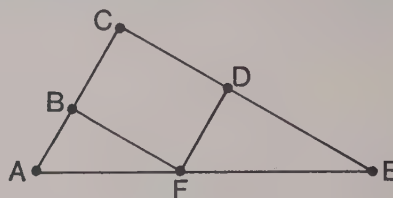
Name all the lines shown.

4.



Name each triangle shown.





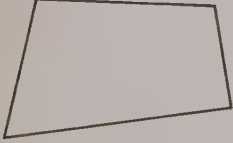



6.





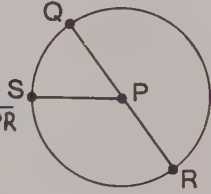
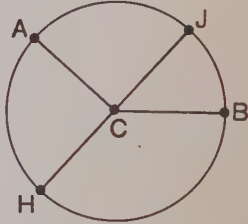
## Polygons

Is it a polygon? If so, name the kind of polygon. Give the number of sides and the number of angles for each polygon.

<p>1. </p> <p style="text-align: center;">pentagon</p> <p><u>  5  </u> sides</p> <p><u>  5  </u> angles</p>	<p>2. </p> <p style="text-align: center;">quadrilateral</p> <p><u>      </u> sides</p> <p><u>      </u> angles</p>	<p>3. </p> <p><u>      </u> sides</p> <p><u>      </u> angles</p>	<p>4. </p> <p><u>      </u> sides</p> <p><u>      </u> angles</p>
<p>5. </p> <p><u>      </u> sides</p> <p><u>      </u> angles</p>	<p>6. </p> <p><u>      </u> sides</p> <p><u>      </u> angles</p>	<p>7. </p> <p><u>      </u> sides</p> <p><u>      </u> angles</p>	<p>8. </p> <p><u>      </u> sides</p> <p><u>      </u> angles</p>

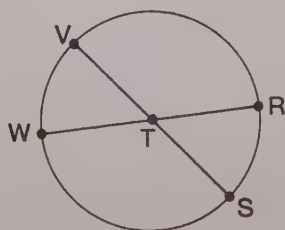
SPM4/U4/84-85

## Circles

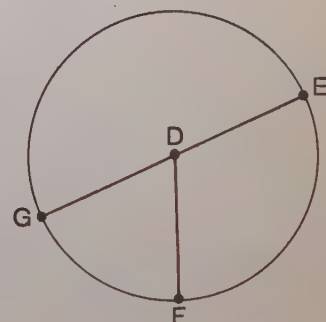
Name	
<p>1. the centre. P</p> <p>2. each radius. <math>\overline{PS}</math>, <math>\overline{PQ}</math>, <math>\overline{PR}</math></p> <p>3. each diameter. <math>\overline{QR}</math></p>	
<p>4. the centre.</p> <p>5. each radius.</p> <p>6. each diameter.</p>	

What is

7. the name of this shape?
8. T?
9.  $\overline{VS}$ ?
10.  $\overline{TR}$ ?
11.  $\overline{WR}$ ?

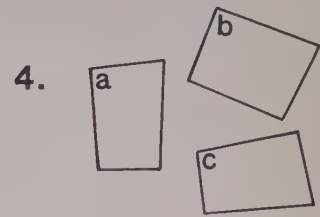
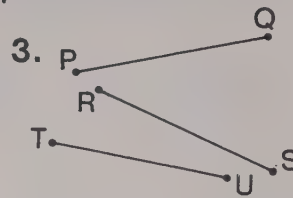
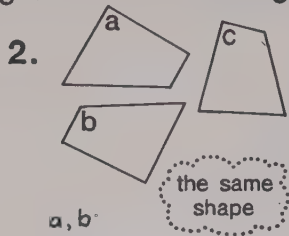
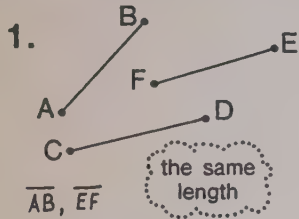


12.  $\overline{DF}$ ?
13. D?
14.  $\overline{DG}$ ?
15.  $\overline{GD}$ ?
16.  $\overline{EG}$ ?

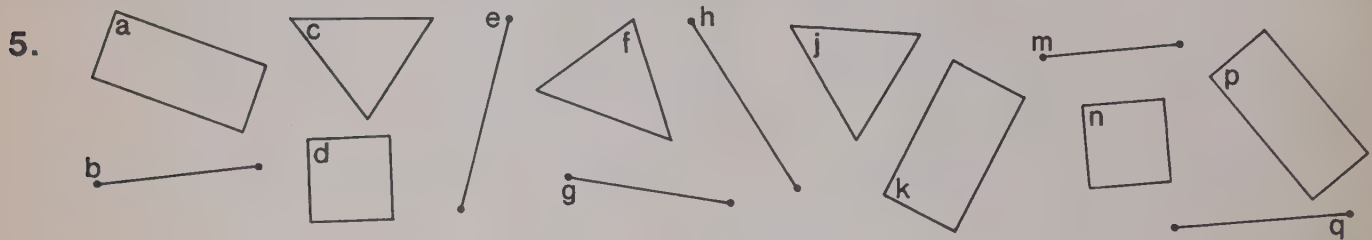


## Congruent Shapes

Which shapes are congruent. Use tracing paper if needed.



Use tracing paper to find five pairs of congruent shapes.

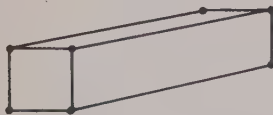


SPM4/U4/88-89

## Solids

For each solid, give the number of vertices, edges, and faces.  
Describe the faces.

1.



8 vertices 12 edges 6 faces

2 squares, 4 rectangles

2.



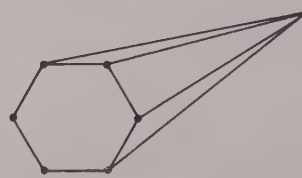
\_\_\_ vertices \_\_\_ edges \_\_\_ faces

3.



\_\_\_ vertices \_\_\_ edges \_\_\_ faces

4.



\_\_\_ vertices \_\_\_ edges \_\_\_ faces

5. Use another sheet of paper.  
Sketch a pattern for each solid shown above.



**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} 3004 \\ - 729 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 605 \\ 293 \\ + 741 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 163 \\ - 95 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} \$721 \\ 483 \\ + 619 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} \$427 \\ - 386 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} \$7914 \\ - 2088 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 1176 \\ - 849 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 3987 \\ + 123 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} \$17 \\ + 28 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 1500 \\ - 585 \\ \hline \end{array}$$

11.  $420 + 806 + 993$

12.  $2716 - (1213 - 804)$

13.  $1741 + 869 + 74$

14.  $\$753 - \$201$

15.  $(210 - 90) - 30$

16.  $210 - (90 - 30)$

Solve. Show your work.

17. Last Saturday the odometer on the car showed 4217 km. This Saturday it shows 5412 km. How far was the car driven this week?

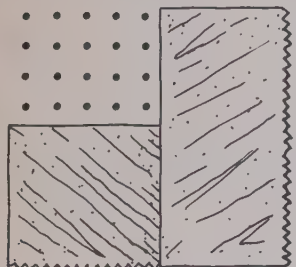
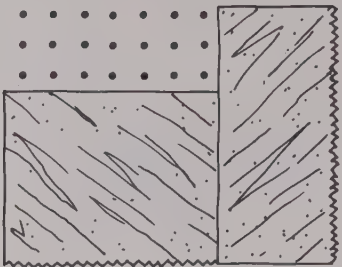
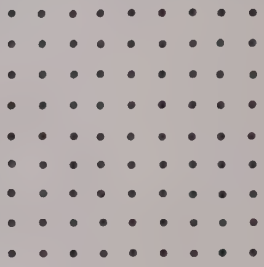
18. The hospital has 336 beds. Only 71 are empty. How many patients are there?

19. The Vanderlippe family was looking for a new car. They had \$2350 in the bank. The bank also promised a loan of up to \$5750. How much could they spend for the car?

20. When school opens in the fall, it will have 92, 117, and 89 students in each of its three grades. Altogether, how many students will it have?

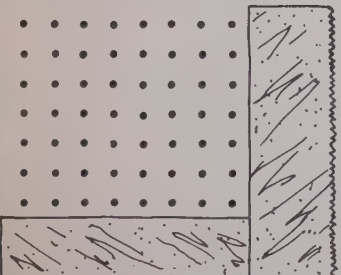
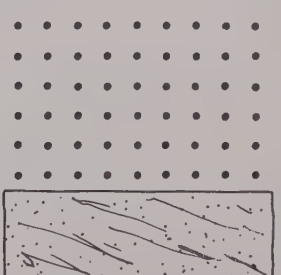
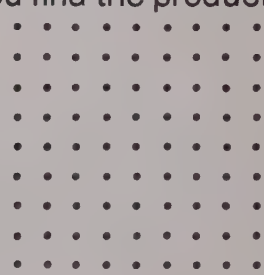
# Basic Facts, One Factor to 5

Multiply.

<p>1. <math>4 \times 5 = 20</math></p> 	<p>2. <math>3 \times 7</math></p> 	<p>Cover as needed to help you find the products.</p> 	
3. $6 \times 4$	4. $5 \times 2$	5. $2 \times 9$	6. $5 \times 9$
7. $7 \times 3$	8. $6 \times 5$	9. $3 \times 5$	10. $4 \times 7$
11. $7 \times 2$	12. $8 \times 4$	13. $5 \times 7$	14. $2 \times 6$
15. $8 \times 5$	16. $9 \times 3$	17. $3 \times 8$	18. $4 \times 9$

# Finding Products with Factors from 0 to 9

Find each product.

<p>1. <math>7 \times 8 = 56</math></p> 	<p>2. <math>6 \times 9</math></p> 	<p>Cover as needed to help you find the products.</p> 	
3. $7 \times 6$	4. $8 \times 9$	5. $6 \times 6$	6. $4 \times 3$
7. $6 \times 8$	8. $6 \times 3$	9. $7 \times 9$	10. $5 \times 5$
11. $3 \times 3$	12. $7 \times 7$	13. $8 \times 2$	14. $8 \times 8$
15. $4 \times 4$	16. $8 \times 7$	17. $9 \times 9$	18. $9 \times 6$



## A Table of Basic Multiplication Facts

The "5 times" Table

$$\begin{array}{l} 5 \times 0 = 0 \\ 5 \times 1 = 5 \\ 5 \times 2 = 10 \\ 5 \times 3 = 15 \\ 5 \times 4 = 20 \\ 5 \times 5 = 25 \\ 5 \times 6 = 30 \\ 5 \times 7 = 35 \\ 5 \times 8 = 40 \\ 5 \times 9 = 45 \end{array}$$

The "times 7" Table

$$\begin{array}{l} 0 \times 7 = 0 \\ 1 \times 7 = 7 \\ 2 \times 7 = 14 \\ 3 \times 7 = 21 \\ 4 \times 7 = 28 \\ 5 \times 7 = 35 \\ 6 \times 7 = 42 \\ 7 \times 7 = 49 \\ 8 \times 7 = 56 \\ 9 \times 7 = 63 \end{array}$$

The Multiplication Basic-Facts Table

x	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9
2	0	2	4	6	8	10	12	14	16	18
3	0	3	6	9	12	15	18	21	24	27
4	0	4	8	12	16	20	24	28	32	36
5	0	5	10	15	20	25	30	35	40	45
6	0	6	12	18	24	30	36	42	48	54
7	0	7	14	21	28	35	42	49	56	63
8	0	8	16	24	32	40	48	56	64	72
9	0	9	18	27	36	45	54	63	72	81

On other paper, write the tables chosen by your teacher from these.

0 times    1 times    2 times    3 times    4 times    5 times    6 times    7 times    8 times    9 times  
 times 0    times 1    times 2    times 3    times 4    times 5    times 6    times 7    times 8    times 9

When finished, use the Basic-Facts Table to check your work.

## Finding the Missing Factor

Complete.

1. <u>5</u> $\times$ 4 = 20	2. <u>    </u> $\times$ 8 = 24	3. 5 $\times$ <u>    </u> = 35
4. <u>    </u> $\times$ 2 = 8	5. <u>    </u> $\times$ 5 = 45	6. <u>    </u> $\times$ 6 = 18
7. <u>    </u> $\times$ 3 = 21	8. <u>    </u> $\times$ 7 = 56	9. <u>    </u> $\times$ 4 = 32
10. <u>    </u> $\times$ 9 = 36	11. <u>    </u> $\times$ 7 = 28	12. <u>    </u> $\times$ 8 = 72
13. 6 $\times$ <u>    </u> = 42	14. 2 $\times$ <u>    </u> = 16	15. 4 $\times$ <u>    </u> = 24
16. 3 $\times$ <u>    </u> = 12	17. 5 $\times$ <u>    </u> = 25	18. 7 $\times$ <u>    </u> = 63
19. 6 $\times$ <u>    </u> = 48	20. 9 $\times$ <u>    </u> = 18	21. 8 $\times$ <u>    </u> = 40
22. 3 $\times$ <u>    </u> = 27	23. 9 $\times$ <u>    </u> = 81	24. 6 $\times$ <u>    </u> = 54

10 and Multiples of 10 as Factors

Multiply.

<p>1. <math>4 \times 60 = 240</math></p> <p><math>4 \times 6 \text{ tens} = 24 \text{ tens}</math></p>	<p>2. <math>8 \times 20</math></p> <p><math>8 \times 2 \text{ tens} = \underline{\hspace{1cm}} \text{ tens}</math></p>	<p>3. <math>7 \times 80</math></p>	<p>4. <math>\begin{array}{r l} \times &amp; 40 \\ 6 &amp; \\ 7 &amp; \\ 3 &amp; \end{array}</math></p>
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5. $3 \times 70$	6. $6 \times 50$	7. $5 \times 90$	8. $9 \times 60$
<p>9. <math>\begin{array}{r l} \times &amp; 30 \\ 3 &amp; \\ 7 &amp; \\ 5 &amp; \\ 8 &amp; \\ 1 &amp; \\ 6 &amp; \end{array}</math></p>	<p>10. <math>\begin{array}{r l} \times &amp; 90 \\ 7 &amp; \\ 9 &amp; \\ 6 &amp; \\ 4 &amp; \\ 0 &amp; \\ 8 &amp; \end{array}</math></p>	<p>11. <math>\begin{array}{r llllll} \times &amp; 10 &amp; 50 &amp; 70 &amp; 60 &amp; 40 &amp; 80 \\ 8 &amp; &amp; &amp; &amp; &amp; &amp; \end{array}</math></p>	<p>12. <math>\begin{array}{r llllll} \times &amp; 20 &amp; 80 &amp; 30 &amp; 70 &amp; 40 &amp; 50 \\ 4 &amp; &amp; &amp; &amp; &amp; &amp; \end{array}</math></p>
		<p>13. <math>\begin{array}{r llllll} \times &amp; 30 &amp; 20 &amp; 50 &amp; 80 &amp; 40 &amp; 70 \\ 9 &amp; &amp; &amp; &amp; &amp; &amp; \end{array}</math></p>	

Multiplying Two - Digit Numbers

Multiply.

<p>1. <math>\begin{array}{r} 32 \\ 8 \\ \hline 16 \\ 240 \\ \hline 256 \end{array}</math></p> <p><math>8 \times 2 = 16</math></p> <p><math>8 \times 30 = 240</math></p>	<p>2. <math>\begin{array}{r} 68 \\ 3 \\ \hline \end{array}</math></p> <p><math>3 \times 8 = 24</math></p> <p><math>3 \times 60 = 180</math></p>	<p>3. <math>\begin{array}{r} 25 \\ 7 \\ \hline \end{array}</math></p>	<p>4. <math>\begin{array}{r} 19 \\ 4 \\ \hline \end{array}</math></p>	<p>5. <math>\begin{array}{r} 36 \\ 5 \\ \hline \end{array}</math></p>
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6. $\begin{array}{r} 47 \\ 3 \\ \hline \end{array}$	7. $\begin{array}{r} 38 \\ 6 \\ \hline \end{array}$	8. $\begin{array}{r} 25 \\ 9 \\ \hline \end{array}$	9. $\begin{array}{r} 56 \\ 2 \\ \hline \end{array}$	10. $\begin{array}{r} 84 \\ 7 \\ \hline \end{array}$
11. $\begin{array}{r} 44 \\ 4 \\ \hline \end{array}$	12. $\begin{array}{r} 79 \\ 8 \\ \hline \end{array}$	13. $\begin{array}{r} 97 \\ 5 \\ \hline \end{array}$	14. $\begin{array}{r} 64 \\ 9 \\ \hline \end{array}$	15. $\begin{array}{r} 67 \\ 6 \\ \hline \end{array}$

**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} 6042 \\ + 3759 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} \$42.16 \\ - 18.37 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 97 \\ \times 5 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 2004 \\ - 738 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 217 \\ 493 \\ + 816 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 74 \\ \times 5 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 1170 \\ 5011 \\ + 2469 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} 3275 \\ - 1596 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 9 \\ \times 6 \\ \hline \end{array}$$

11.  $4 \times 63$

12.  $\$20.95 - \$4.77$

13.  $27 + 692 + 805$

14.  $1650 - 1171$

15.  $7 \times 81$

16.  $\$33.73 + \$16.85$

Solve. Show your work.

17. One box contains 750 screws. Another has 575. A third has 475. How many screws are there in all?

18. Marta bought 6 packages of cheese. Each package holds 32 slices. How many slices are there in all?

19. The thumbtack box holds 600 tacks when full. Now there are only 123 tacks in the box. How many tacks have been used?

20. Food supplies for camp cost \$37.86. The first-aid kit cost \$17.95. What was the total cost for the food and first-aid kit?

21. A carton holds 24 packages of cereal. Each package has 8 individual boxes. How many individual boxes are there in the carton?

22. The flight out to the island was 270 km. The direct trip back was only 213 km. How much longer was the flight out?



100 and Multiples of 100 as Factors

Multiply.

<p>1. <math>5 \times 300</math> 1500</p> <p>5 x 3 hundreds = 15 hundreds</p>	<p>2. <math>4 \times 200</math></p> <p>4 x 2 hundreds = ____ hundreds</p>	<p>3. <math>2 \times 700</math></p>	<p>4. <math>\begin{array}{r} \times \\ 7 \\ 4 \\ 8 \end{array} \overline{) 700}</math></p>
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5. $3 \times 800$	6. $4 \times 400$	7. $7 \times 600$	8. $8 \times 300$
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<p>9. <math>\begin{array}{r} \times \\ 6 \\ 2 \\ 7 \\ 1 \\ 9 \\ 4 \end{array} \overline{) 900}</math></p>	<p>10. <math>\begin{array}{r} \times \\ 8 \\ 0 \\ 5 \\ 2 \\ 4 \\ 6 \end{array} \overline{) 600}</math></p>	<p>11. <math>\begin{array}{r} \times \\ 3 \end{array} \overline{) \begin{array}{l} 200 \quad 300 \quad 700 \quad 900 \quad 400 \quad 600 \end{array}}</math></p> <p>12. <math>\begin{array}{r} \times \\ 5 \end{array} \overline{) \begin{array}{l} 500 \quad 200 \quad 700 \quad 400 \quad 100 \quad 900 \end{array}}</math></p> <p>13. <math>\begin{array}{r} \times \\ 8 \end{array} \overline{) \begin{array}{l} 400 \quad 100 \quad 800 \quad 200 \quad 900 \quad 500 \end{array}}</math></p>
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SPM4/U5/112-113

Multiplying Three - Digit Numbers

<p>Multiply.</p> <p>1. <math>\begin{array}{r} 438 \\ \times 3 \\ \hline 24 \\ 90 \\ 1200 \\ \hline 1314 \end{array}</math></p> <p>24 ← 3 x 8 90 ← 3 x 30 1200 ← 3 x 400</p>	<p>2. <math>\begin{array}{r} 267 \\ \times 5 \\ \hline \end{array}</math></p> <p>← 5 x 7 ← 5 x 60 ← 5 x 200</p>	<p>3. <math>\begin{array}{r} 517 \\ \times 3 \\ \hline \end{array}</math></p>	<p>4. <math>\begin{array}{r} 384 \\ \times 4 \\ \hline \end{array}</math></p>
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5. $\begin{array}{r} 736 \\ \times 2 \\ \hline \end{array}$	6. $\begin{array}{r} 684 \\ \times 6 \\ \hline \end{array}$	7. $\begin{array}{r} 562 \\ \times 9 \\ \hline \end{array}$	8. $\begin{array}{r} 794 \\ \times 7 \\ \hline \end{array}$	9. $\begin{array}{r} 185 \\ \times 8 \\ \hline \end{array}$
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## The Standard Form for Multiplication

Multiply. Use the standard form.

1. $\begin{array}{r} 36 \\ 4 \\ \hline 144 \end{array}$	2. $\begin{array}{r} 47 \\ 6 \\ \hline 2 \end{array}$	3. $\begin{array}{r} 68 \\ 3 \\ \hline \end{array}$	4. $\begin{array}{r} 85 \\ 6 \\ \hline \end{array}$	5. $\begin{array}{r} 16 \\ 7 \\ \hline \end{array}$
---	---	---	---	---

6.  $\begin{array}{r} 59 \\ 2 \\ \hline \end{array}$

7.  $\begin{array}{r} 48 \\ 4 \\ \hline \end{array}$

8.  $\begin{array}{r} 80 \\ 8 \\ \hline \end{array}$

9.  $\begin{array}{r} 23 \\ 7 \\ \hline \end{array}$

10.  $\begin{array}{r} 73 \\ 9 \\ \hline \end{array}$

11.  $\begin{array}{r} 375 \\ 8 \\ \hline \end{array}$

12.  $\begin{array}{r} 485 \\ 5 \\ \hline \end{array}$

13.  $\begin{array}{r} 408 \\ 7 \\ \hline \end{array}$

14.  $\begin{array}{r} 917 \\ 4 \\ \hline \end{array}$

15.  $\begin{array}{r} 861 \\ 9 \\ \hline \end{array}$

16.  $\begin{array}{r} 649 \\ 8 \\ \hline \end{array}$

17.  $\begin{array}{r} 945 \\ 9 \\ \hline \end{array}$

18.  $\begin{array}{r} 609 \\ 5 \\ \hline \end{array}$

19.  $\begin{array}{r} 537 \\ 3 \\ \hline \end{array}$

20.  $\begin{array}{r} 962 \\ 6 \\ \hline \end{array}$

## Multiplying Dollars and Cents

Multiply.

1. $\begin{array}{r} \$2.89 \\ 5 \\ \hline \$14.45 \end{array}$	2. $\begin{array}{r} \$6.13 \\ 7 \\ \hline 1 \end{array}$	3. $\begin{array}{r} \$9.26 \\ 6 \\ \hline \end{array}$	4. $\begin{array}{r} \$1.48 \\ 4 \\ \hline \end{array}$	5. $\begin{array}{r} \$0.86 \\ 3 \\ \hline \end{array}$
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6.  $\begin{array}{r} \$0.73 \\ 4 \\ \hline \end{array}$

7.  $\begin{array}{r} \$7.39 \\ 3 \\ \hline \end{array}$

8.  $\begin{array}{r} \$9.46 \\ 2 \\ \hline \end{array}$

9.  $\begin{array}{r} \$5.34 \\ 5 \\ \hline \end{array}$

10.  $\begin{array}{r} \$4.57 \\ 8 \\ \hline \end{array}$

11.  $\begin{array}{r} \$7.34 \\ 6 \\ \hline \end{array}$

12.  $\begin{array}{r} \$3.61 \\ 9 \\ \hline \end{array}$

13.  $\begin{array}{r} \$0.49 \\ 7 \\ \hline \end{array}$

14.  $\begin{array}{r} \$2.09 \\ 9 \\ \hline \end{array}$

15.  $\begin{array}{r} \$0.12 \\ 8 \\ \hline \end{array}$

## More Than Two Factors

Multiply. Use other paper as needed.

$\begin{array}{r} \text{54} \times 4 \\ \hline 1. \text{6} \times 9 \times 4 \quad 216 \\ \hline \text{6} \times 36 \end{array}$	$\begin{array}{r} \text{12} \times 7 \\ \hline 2. \text{4} \times 3 \times 7 \\ \hline 4 \times 21 \end{array}$	<p>3. <math>7 \times 2 \times 6</math></p> <p>4. <math>2 \times 8 \times 3 \times 5</math></p>
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5.  $2 \times 3 \times 4$

6.  $5 \times 7 \times 7$

7.  $3 \times 4 \times 5$

8.  $1 \times 6 \times 5$

9.  $1 \times 4 \times 4 \times 6$

10.  $6 \times 0 \times 7$

11.  $8 \times 3 \times 9 \times 5$

12.  $2 \times 9 \times 1 \times 9$

13.  $7 \times 1 \times 8 \times 2$

14.  $3 \times 8 \times 4$

15.  $4 \times 3 \times 6 \times 6$

16.  $7 \times 2 \times 5 \times 9$

SPM4/U5/122

## Multiplication, Addition, and Subtraction Together

Perform the indicated operations. Work inside the parentheses first.  
Use other paper as needed.

<p>1. <math>(67 + 44) \times 3 \quad 333</math></p> $\begin{array}{r} 67 \\ + 44 \\ \hline 111 \end{array} \quad \begin{array}{r} 111 \\ \times 3 \\ \hline 333 \end{array}$	<p>2. <math>(81 \times 7) - 39</math></p> $\begin{array}{r} 81 \\ \times 7 \\ \hline \end{array}$	<p>3. <math>(81 \times 3) - 7</math></p> <p>4. <math>(81 - 3) \times 7</math></p>
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5.  $(52 \times 7) - 160$

6.  $394 + (260 \times 8)$

7.  $(394 + 260) \times 8$

8.  $(35 + 518) \times 3$

9.  $35 + (518 \times 3)$

10.  $(35 \times 3) + 518$

11.  $3000 - (323 \times 3)$

12.  $52 \times (740 - 732)$

13.  $(2001 - 643) \times 4$

14.  $200 \times (200 - 192)$

15.  $(438 \times 7) + 4387$

16.  $2005 - (238 \times 6)$



**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} \$41.63 \\ - 17.85 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 200 \\ \times 7 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 468 \\ 723 \\ + 845 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 46 \\ \times 9 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} \$4.37 \\ \times 5 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 4391 \\ - 2435 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 862 \\ \times 3 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} \$21.70 \\ 43.86 \\ + 24.81 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} \$1471 \\ - 896 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 583 \\ \times 6 \\ \hline \end{array}$$

11.  $\$20.07 - \$8.68$

12.  $3 \times 8 \times 7$

13.  $756 - (83 + 142)$

14.  $(12 - 7) \times 5$

15.  $10 \times 8$

16.  $(91 - 88) \times 148$

Solve. Show your work.

17. Winifred is saving her \$1.75 allowance each week. How much will she have in 4 weeks?

18. The film could be shown to 175 persons 4 times each hour. How many persons could see the film in 8 h?

19. Rona was given \$50.00 to buy supplies for the office. Her purchases amounted to \$27.53. How much did she have to return to the office?

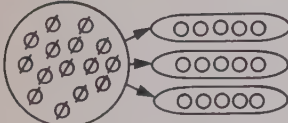
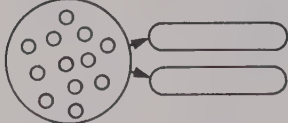
20. The builder charged \$47.50 for painting, \$23.60 for carpentry, and \$17.95 for materials. What was the total bill?

21. Cupcakes come from the bakery, 2 in each package. A box contains 36 packages. A carton contains 6 boxes. How many cupcakes does a carton hold?

22. 500 envelopes come in a box. Jon has 4 boxes. How many envelopes does Jon have?

# Sharing

Draw a picture and complete the division fact.

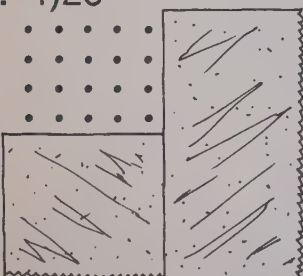
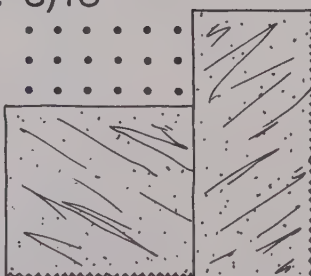
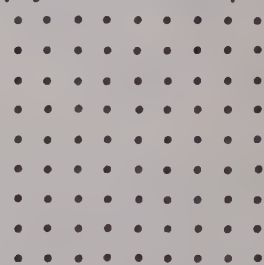
<p>1. <math>15 \div 3 = \underline{5}</math></p> 	<p>2. <math>12 \div 2 = \underline{\quad}</math></p> 	<p>3. <math>20 \div 4 = \underline{\quad}</math></p>	<p>4. <math>10 \div 5 = \underline{\quad}</math></p>
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5.  $12 \div 4 = \underline{\quad}$       6.  $16 \div 2 = \underline{\quad}$       7.  $21 \div 3 = \underline{\quad}$       8.  $25 \div 5 = \underline{\quad}$

9.  $3\overline{)6}$       10.  $4\overline{)28}$       11.  $8\overline{)16}$       12.  $6\overline{)18}$

# Finding the Quotient

Find the quotient.

<p>1. <math>4\overline{)20}</math></p> 	<p>2. <math>3\overline{)18}</math></p> 	<p>Cover as needed to help you find the quotient.</p> 
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3.  $3\overline{)21}$       4.  $5\overline{)30}$       5.  $9\overline{)54}$       6.  $6\overline{)24}$       7.  $2\overline{)18}$

8.  $7\overline{)42}$       9.  $8\overline{)32}$       10.  $3\overline{)12}$       11.  $5\overline{)45}$       12.  $9\overline{)27}$

13.  $7\overline{)56}$       14.  $6\overline{)48}$       15.  $8\overline{)72}$       16.  $4\overline{)28}$       17.  $2\overline{)10}$

## Related Multiplication and Division Facts

Write the complete family of facts for each group of numbers.

1. 5, 7, 35 $5 \times 7 = 35$ $7 \times 5 = 35$ $35 \div 7 = 5$ $35 \div 5 = 7$	2. 9, 4, 36 $9 \times 4 = 36$	3. 6, 7, 42	4. 6, 8, 48
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5. 5, 6, 30

6. 4, 7, 28

7. 8, 7, 56

8. 8, 3, 24

9. 9, 8, 72

10. 3, 6, 18

11. 4, 6, 24

12. 9, 5, 45

## Using Multiplication to Divide

Divide. Show the multiplication fact you use.

1. $9 \overline{)36}^4$ $9 \times 4 = 36$	2. $7 \overline{)56}$ $7 \times \underline{\quad} = 56$	3. $4 \overline{)28}$	4. $2 \overline{)18}$	5. $6 \overline{)48}$
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6.  $6 \overline{)24}$ 7.  $7 \overline{)42}$ 8.  $8 \overline{)32}$ 9.  $5 \overline{)30}$ 10.  $3 \overline{)12}$ 11.  $6 \overline{)12}$ 12.  $9 \overline{)63}$ 13.  $5 \overline{)40}$ 14.  $7 \overline{)35}$ 15.  $3 \overline{)24}$ 16.  $8 \overline{)64}$ 17.  $2 \overline{)14}$ 18.  $9 \overline{)54}$ 19.  $5 \overline{)15}$ 20.  $4 \overline{)16}$



**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} \$27.41 \\ + 56.32 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 432 \\ \times 6 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 1903 \\ + 5677 \\ \hline \end{array}$$

4. 
$$7 \overline{)56}$$

5. 
$$\begin{array}{r} 38 \\ \times 7 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 2107 \\ - 485 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} \$10.03 \\ - 3.74 \\ \hline \end{array}$$

8. 
$$9 \overline{)72}$$

9. 
$$\begin{array}{r} 6304 \\ 295 \\ + 1784 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 500 \\ \times 3 \\ \hline \end{array}$$

11.  $56 \div 7$

12.  $\$402 - \$179$

13.  $7 \times 2 \times 5 \times 3$

14.  $217 + 804 + 193$

15.  $3 \times 5 \times 2 \times 4$

16.  $7 \times (140 - 88)$

Solve. Show your work.

17. Many's father won a contest at the grocery store. To claim the prize he had to answer this "skill-testing question."  
 $4000 - (378 \times 6) + 982 = ?$   
What is the correct answer?

18. The hardware company buys a case of light bulbs. The case holds 3 cartons. A carton holds 6 packages. Each package holds 4 bulbs. How many bulbs are in the case?

19. This summer the grain harvest at the MacLeod farm was 4294 kg. Last year it was only 3716 kg. How much larger is the crop this year?

20. Toby has 54 rabbits. He wants to put an equal number in each pen. He has 6 pens. How many rabbits should he put in each pen?

21. The Lawry family car holds 54 L of gasoline. When Mrs. Lawry had it filled, it took 37 L. How many litres were already in it?

22. Jean had \$87.16 in his savings account. The bank added \$5.88 interest. Now how much does he have?

## Finding the Number of Groups

Divide. Show the multiplication fact you use.

1. $4 \overline{)36}$ $4 \times 9 = 36$	2. $8 \overline{)56}$ $8 \times \underline{\quad} = 56$	3. $7 \overline{)28}$	4. $9 \overline{)18}$	5. $8 \overline{)48}$
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6.  $4 \overline{)24}$       7.  $6 \overline{)42}$       8.  $4 \overline{)32}$       9.  $6 \overline{)30}$       10.  $4 \overline{)12}$

11.  $2 \overline{)12}$       12.  $7 \overline{)63}$       13.  $8 \overline{)40}$       14.  $5 \overline{)35}$       15.  $8 \overline{)24}$

16.  $6 \overline{)36}$       17.  $7 \overline{)14}$       18.  $6 \overline{)54}$       19.  $3 \overline{)15}$       20.  $7 \overline{)49}$

## Extending the Division Facts

Divide.

1. $3 \overline{)150}$ $3 \times 50 = 150$	2. $5 \overline{)200}$ $5 \times \underline{\quad} = 200$	3. $6 \overline{)180}$	4. $4 \overline{)160}$	5. $6 \overline{)300}$
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6.  $7 \overline{)210}$       7.  $8 \overline{)480}$       8.  $8 \overline{)320}$       9.  $2 \overline{)120}$       10.  $5 \overline{)350}$

11.  $4 \overline{)280}$       12.  $7 \overline{)420}$       13.  $2 \overline{)180}$       14.  $8 \overline{)640}$       15.  $4 \overline{)360}$

16.  $2 \overline{)60}$       17.  $9 \overline{)630}$       18.  $8 \overline{)160}$       19.  $9 \overline{)810}$       20.  $5 \overline{)400}$

## Remainders

Divide. Show the quotient and the remainder.

$\begin{array}{r} 4 \text{ R } 2 \\ 9 \overline{)38} \\ \underline{36} \phantom{0} \\ 2 \end{array}$ <p style="text-align: center;"><math>\leftarrow 9 \times 4</math></p>	$\begin{array}{r} 5 \\ 5 \overline{)28} \\ \underline{25} \phantom{0} \\ 3 \end{array}$ <p style="text-align: center;"><math>\leftarrow 5 \times 5</math></p>	3. $8 \overline{)60}$	4. $4 \overline{)23}$	5. $7 \overline{)52}$
--	---	-----------------------	-----------------------	-----------------------

6.  $8 \overline{)26}$

7.  $9 \overline{)58}$

8.  $3 \overline{)20}$

9.  $6 \overline{)38}$

10.  $4 \overline{)19}$

11.  $7 \overline{)41}$

12.  $3 \overline{)28}$

13.  $2 \overline{)11}$

14.  $8 \overline{)63}$

15.  $4 \overline{)30}$

16.  $8 \overline{)19}$

17.  $2 \overline{)15}$

18.  $9 \overline{)26}$

19.  $6 \overline{)53}$

20.  $5 \overline{)49}$

## Practice

Solve. Show your work.

- 3 persons agree to share equally a job of addressing 120 envelopes. How many will each have to address?
- If the Chens drive 125 km after lunch, they will cover 304 km today. How far have they gone already?
- The 54 recruits will be divided equally into 6 squads. How many will be in each squad?
- Ticket sales for the three performances of the play are \$36.75, \$29.15 and \$27.00. What is the total?
- Each student in the school volunteers to make 4 items for the Autumn Craft Sale. There are 168 students in the school. How many items will they make in all?
- The river splits into 2 branches. Each branch has 6 boathouses. Each boathouse has 7 boats. How many boats are there in all?



**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} 3017 \\ - 486 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} \$2780 \\ 4216 \\ + 1539 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 435 \\ \times 7 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 21 \\ \times 0 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} \$16.25 \\ 43.93 \\ + 17.08 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} \$7.34 \\ \times 5 \\ \hline \end{array}$$

7. 
$$9 \overline{)630}$$

8. 
$$\begin{array}{r} 600 \\ \times 7 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} \$16.07 \\ - 3.21 \\ \hline \end{array}$$

10. 
$$7 \overline{)56}$$

11.  $1238 - 715$

12.  $(3 + 4) \times 412$

13.  $(17 \times 9) - 149$

14.  $7 \times 3 \times 8 \times 2$

15.  $86 + 419 + 307$

16.  $(1335 + 1665) - 1536$

Solve. Show your work.

17. The Pryor's bank account had \$7615 in it. They withdrew \$1955 to take a trip. How much does that leave in the account?

18. On one of its best days, Meg's business had \$5388 in direct sales and \$3574 in mail orders. What was the sales total for the day?

19. Raffle tickets come 10 in a book. Giovanni has sold 9 books. How many tickets has he sold?

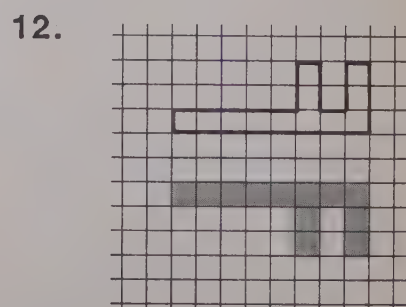
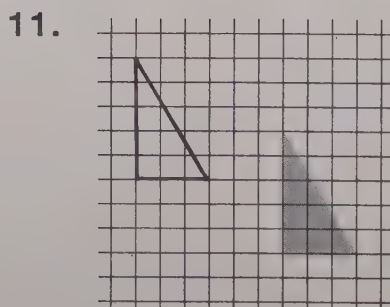
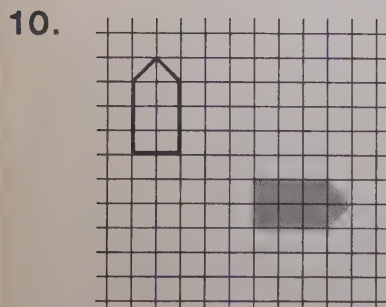
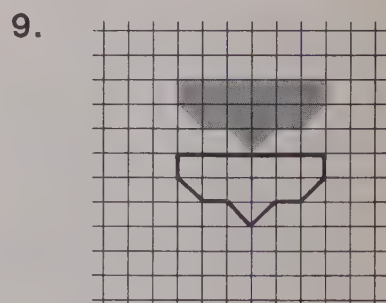
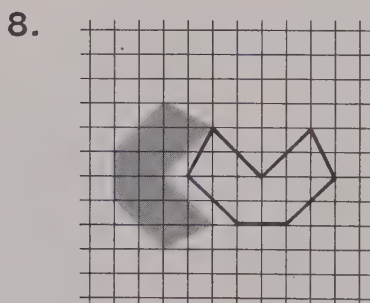
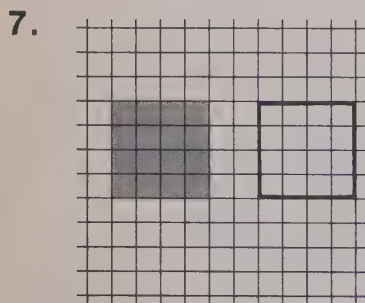
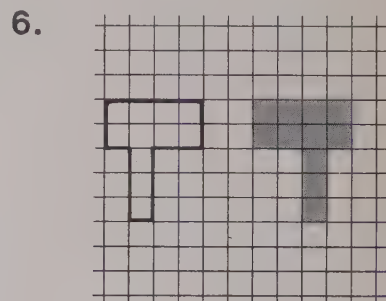
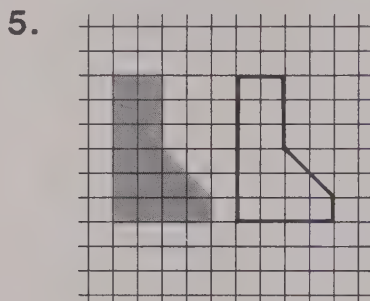
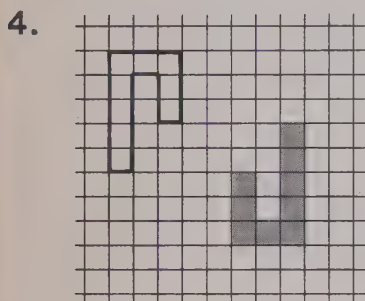
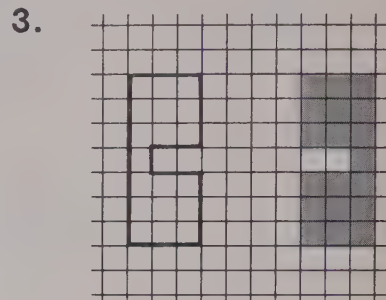
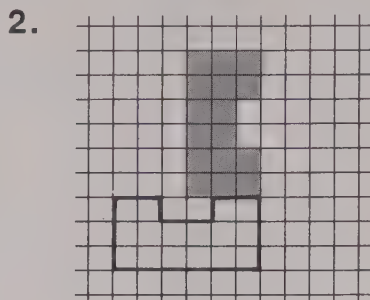
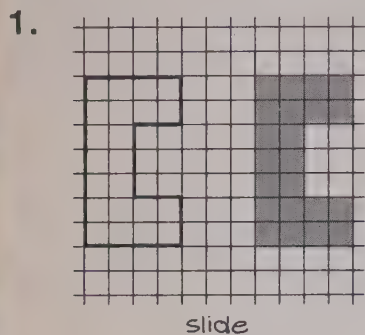
20. Vito solved the cube puzzle in 175 s. Angelo took 232 s. How much longer did Angelo take?

21. When the tournament was postponed, the coach called 6 parents. Each parent called 6 more parents, each of whom called 6 more. In this way, how many were told of the postponement?

22. Diesel fuel needs for the farm were 3217 L in June, 3075 L in July, and 2871 L in August. How much fuel was used in all during the three months?

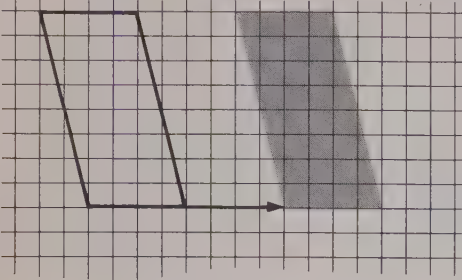
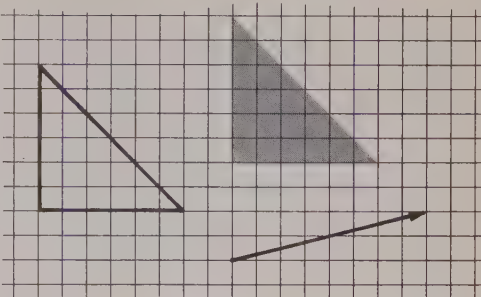
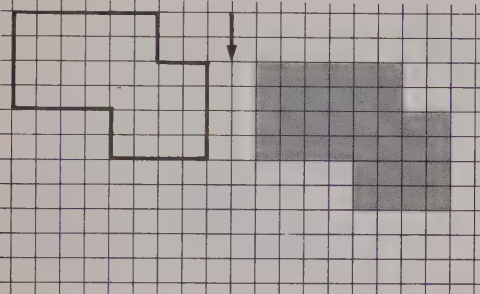
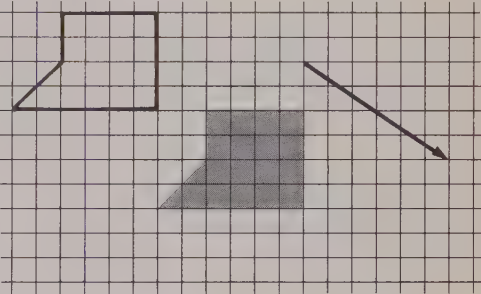
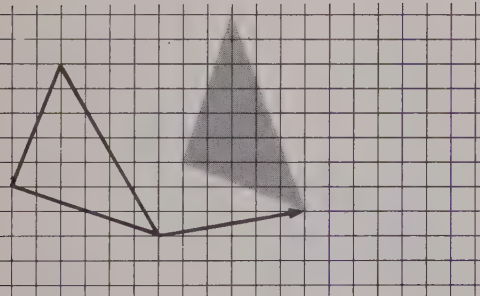
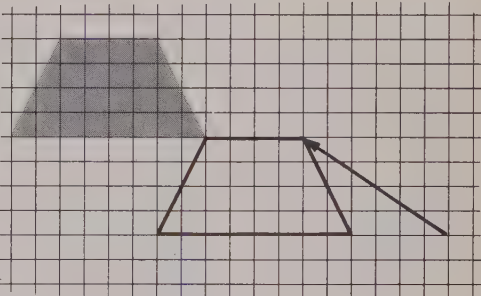
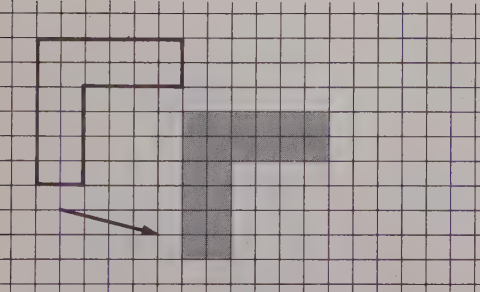
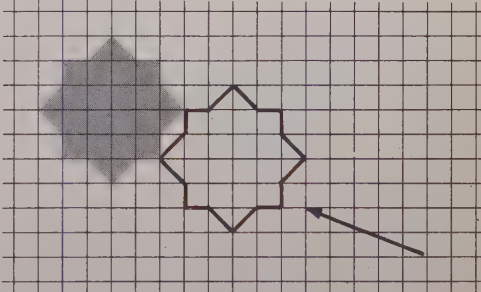
# Motions for Matching Congruent Shapes

Use tracing paper. Tell whether you can slide, flip, or turn a tracing of the white shape to match the gray shape.



## Slides

Use tracing paper. Test whether the gray shape is the slide image of the white shape for the given slide arrow.

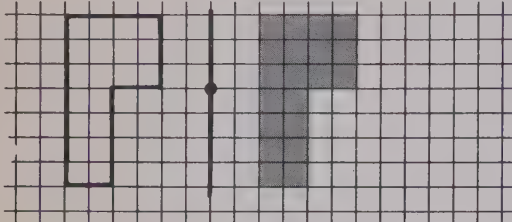
<p>1.</p>  <p>no</p> <p>slide arrow too short!</p>	<p>2.</p> 
<p>3.</p> 	<p>4.</p> 
<p>5.</p> 	<p>6.</p> 
<p>7.</p> 	<p>8.</p> 



## Flips

Use tracing paper. Test whether the gray shape is the flip image of the white shape for the given flip line.

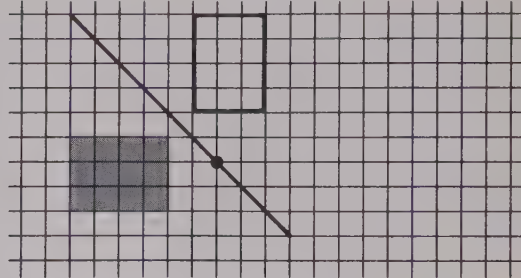
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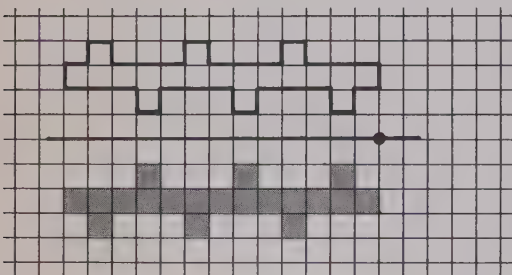
no

gray shape is not "flipped"

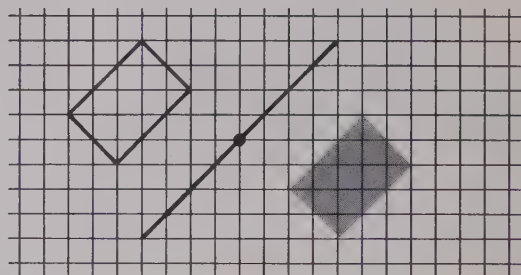
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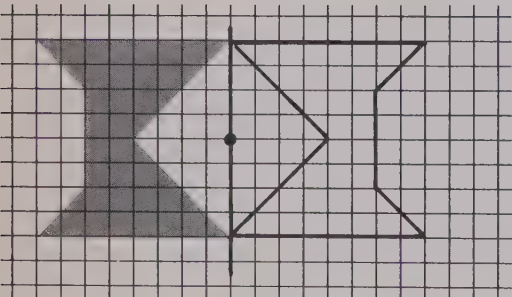
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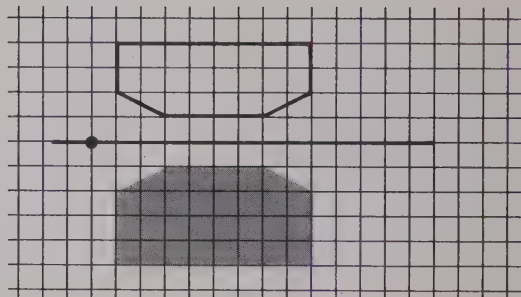
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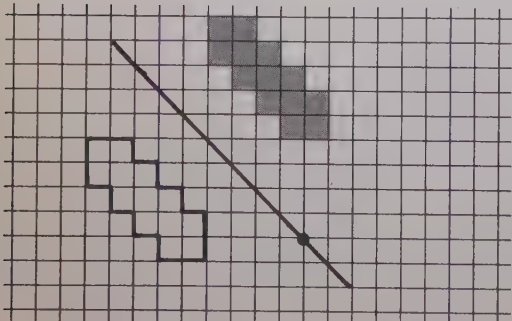
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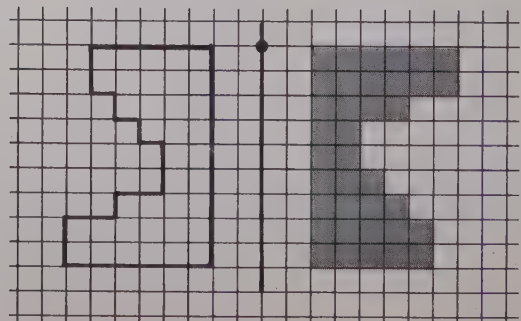
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7.



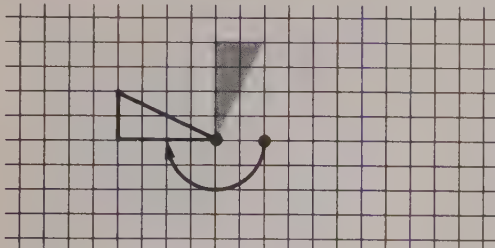
8.



## Turns

Use tracing paper. Test whether the gray shape is the turn image of the white shape for the given turn centre and turn arrow.

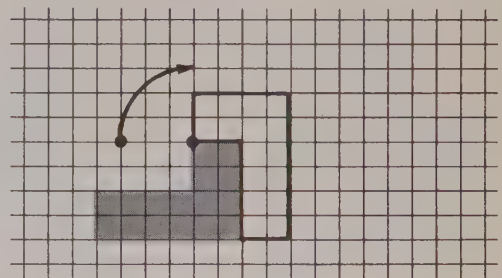
1.



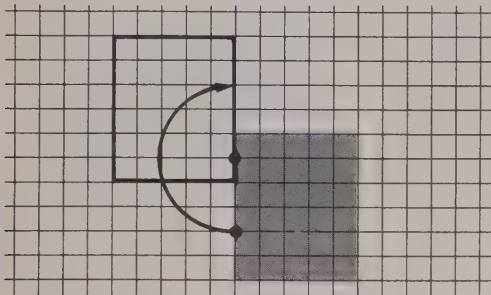
no

not enough turn

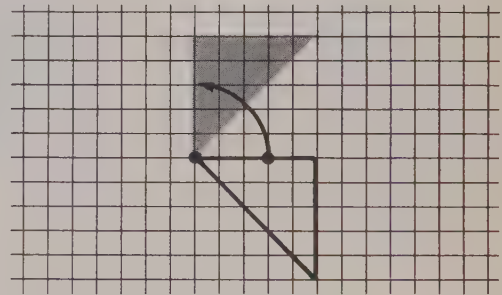
2.



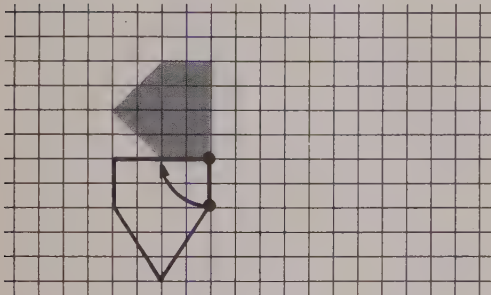
3.



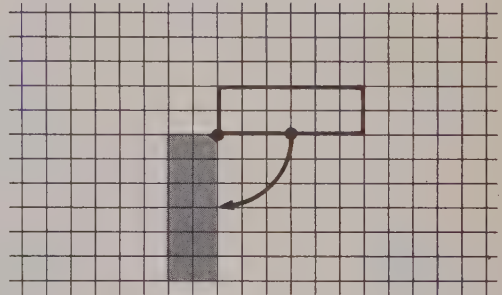
4.



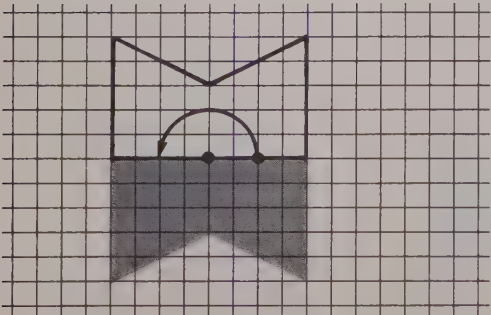
5.



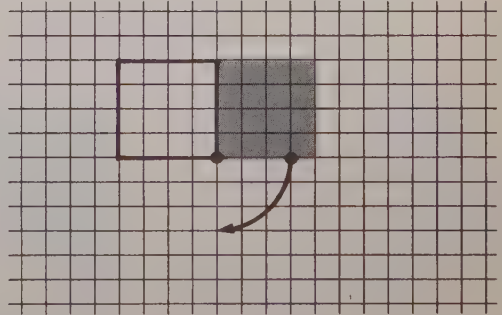
6.



7.



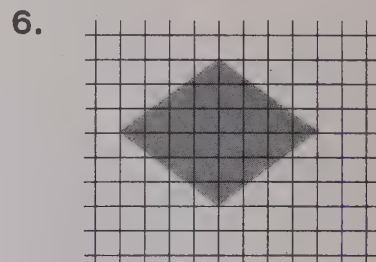
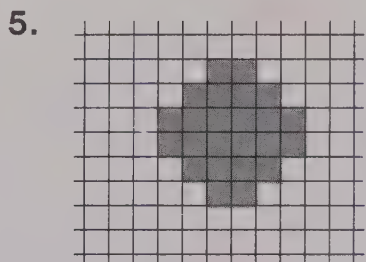
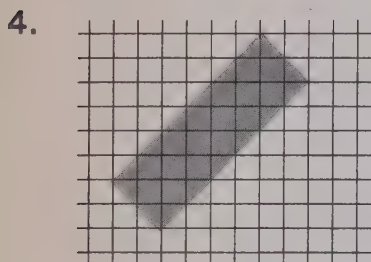
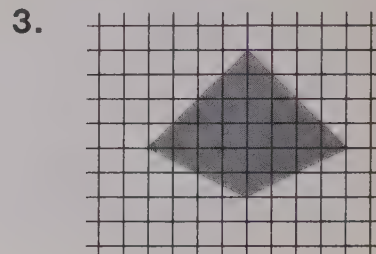
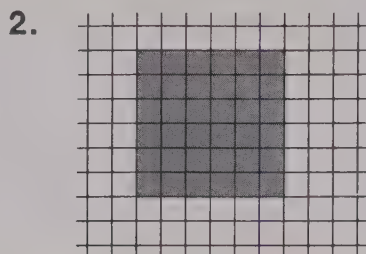
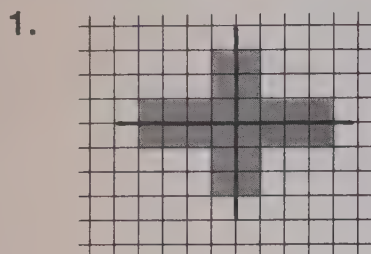
8.



## Flip Lines and Lines of Symmetry

Draw the lines of symmetry for each shape.

Guess a line of symmetry. Then use tracing paper to check:  
The part of a figure on one side of a line of symmetry is the flip image of the part on the other side.

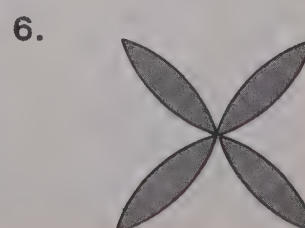
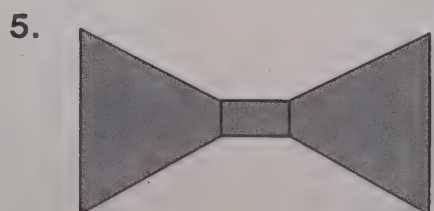
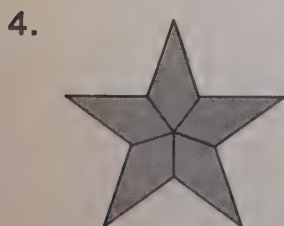
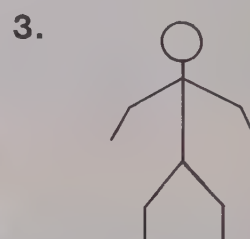
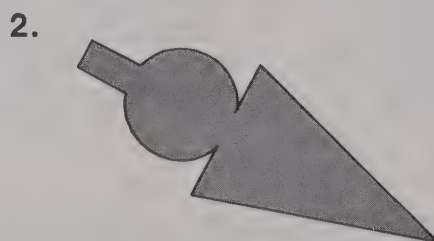
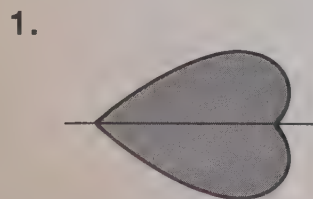


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## Checking for Symmetry

Draw the lines of symmetry for each shape.

Trace the shape. Then look for a way to fold the tracing paper so that the parts of the shape on each fold match.

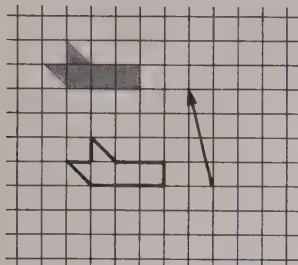




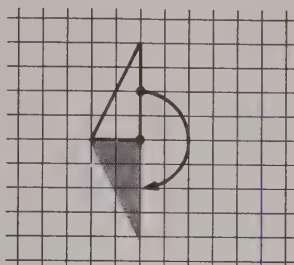
## Practice

Use tracing paper. Test whether the gray shape is a slide, flip, or turn image of the white shape for the given slide arrow, flip line, or turn arrow.

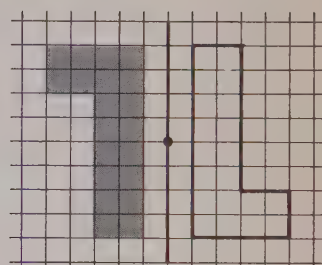
1.



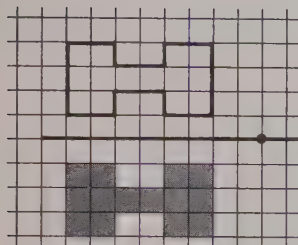
2.



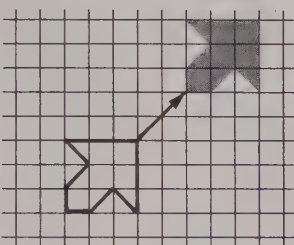
3.



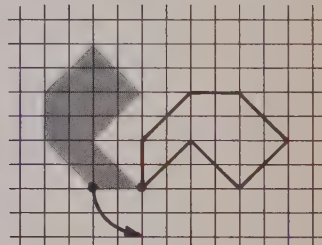
4.



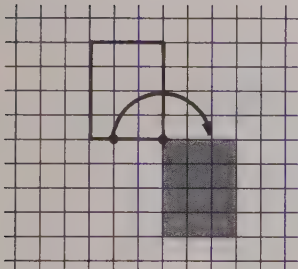
5.



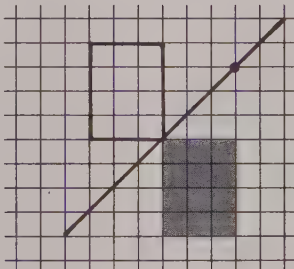
6.



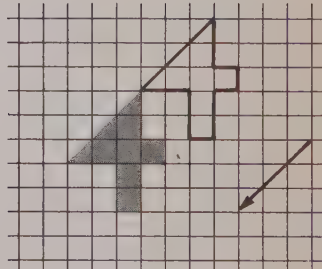
7.



8.

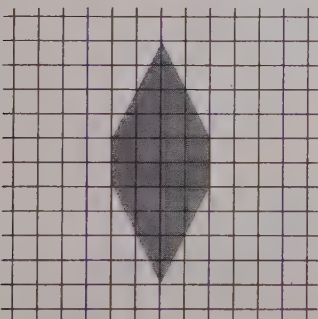


9.

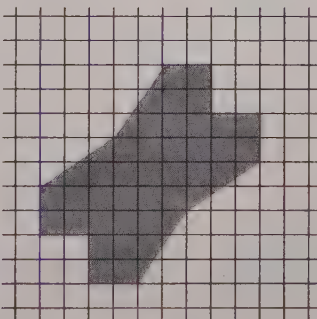


Find the lines of symmetry for each shape.  
Use tracing paper to check.

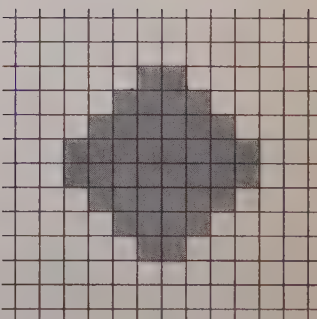
10.



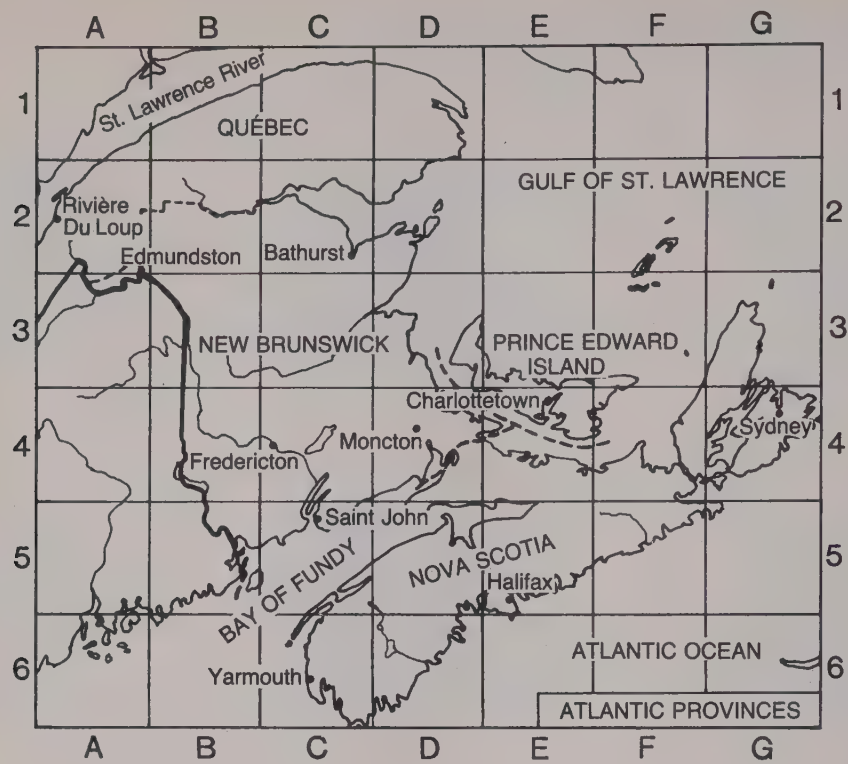
11.



12.



Places on a Map



Name the region for

1. Charlottetown. (E,4)	2. Yarmouth. (C, 5)	3. Sydney.
4. Halifax.	5. Moncton.	6. Bathurst.
7. Rivière Du Loup.	8. Fredericton.	9. Edmundston.

Name the regions for

10. the border of Canada and the United States.
11. New Brunswick.
12. the Bay of Fundy.
13. the Nova Scotia coastline.

Name

14. a city in region (C, 5).
15. a river in region (B, 1).
16. a province in regions (D, 3), (D, 4), (E, 3), (E, 4), (F, 3), (F, 4).
17. two provinces that share region (C, 2).

## Positions on a Grid

Write a number pair for each point.

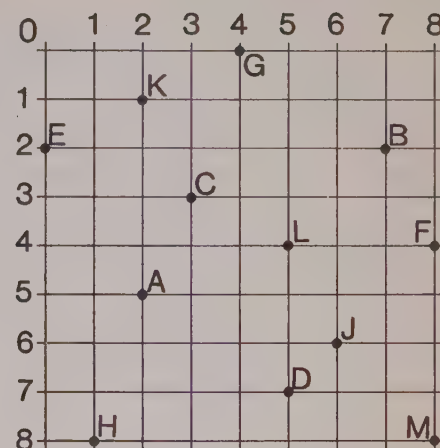
1. A	2. B	3. C
------	------	------

4. D	5. E	6. F
7. G	8. H	9. J
10. K	11. L	12. M

On the grid, draw a point for each number pair.

13. N(5, 3)	14. P(0, 6)	15. Q(7, 5)
-------------	-------------	-------------

16. R(2, 4)	17. S(4, 8)	18. T(6, 0)
19. U(1, 1)	20. V(3, 7)	21. W(8, 2)



## Practice

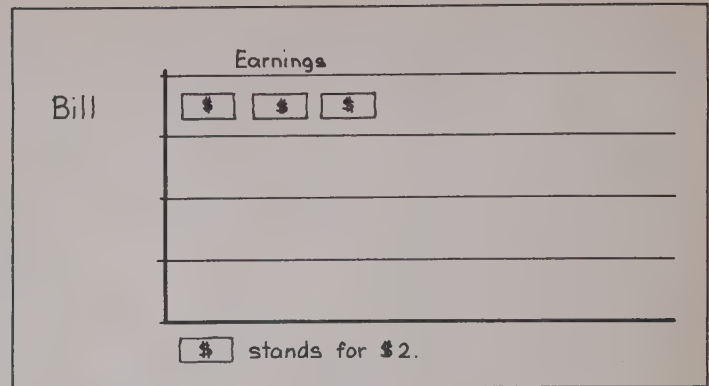
- Sally delivers newspapers to people living in 3 large apartment buildings. She has 78 customers in one building. In the other two she has 56 customers and 68 customers. How many papers does she need?
- The library has 420 books which it plans to display on 7 shelves. All the shelves are to have the same number of books. How many books should be put on each shelf?
- Maria received \$10.00 for her birthday. She bought a puzzle for \$1.89 and a book for \$2.95. How much does she have left?
- 265 students attend Moro School. Each student has agreed to find 3 sponsors for the play. How many sponsors will that be?
- St. Jacques is 415 km away and Rawling is 88 km beyond that. How far away is Rawling?
- 2017 people voted in the town election this year. 1926 voted last year. How many more voted this year?



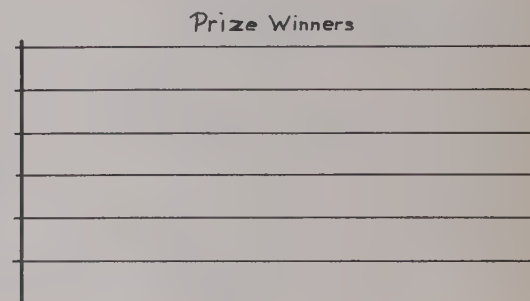
## Drawing Pictographs

Draw a pictograph for the given information.

	Worker	Earnings
1.	Bill	\$ 6
	Julie	\$10
	Ginny	\$ 6
	Melvin	\$ 8



	Grade	Prize Winners
2.	1	6
	2	3
	3	9
	4	6
	5	12
	6	9

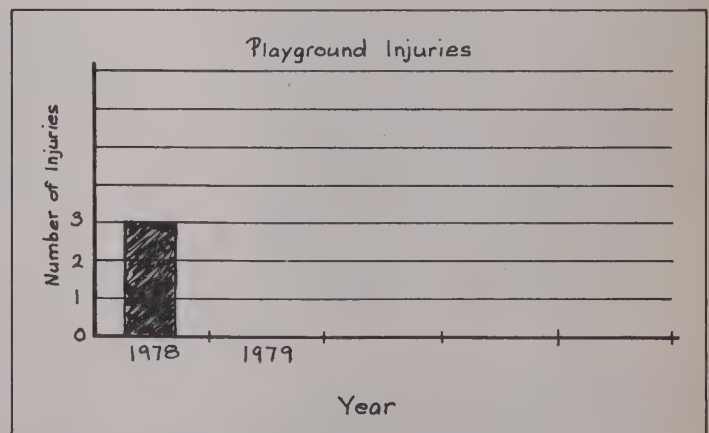


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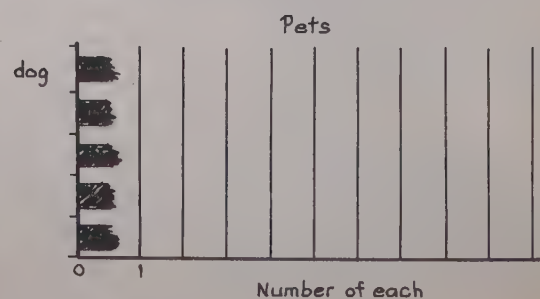
## Drawing Bar Graphs

Draw a bar graph for the given information.

	Year	Playground Injuries
1.	1978	3
	1979	0
	1980	4
	1981	5
	1982	2



	Pet	Number
2.	dog	8
	cat	5
	guinea pig	3
	fish	7
	gerbil	4



**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} \$5.69 \\ + 7.64 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 5210 \\ - 3187 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 274 \\ \times 7 \\ \hline \end{array}$$

4. 
$$7 \overline{)630}$$

5. 
$$\begin{array}{r} \$3.71 \\ \times 5 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 7003 \\ - 2138 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 703 \\ 815 \\ + 362 \\ \hline \end{array}$$

8. 
$$8 \overline{)60}$$

9. 
$$\begin{array}{r} 415 \\ \times 8 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 748 \\ - 192 \\ \hline \end{array}$$

11.  $273 - 186$

12.  $540 \div 9$

13.  $9 \times 57$

14.  $72 \div 8$

15.  $23 + 806 + 94$

16.  $3 \times 2 \times 5 \times 7$

17.  $\$4.19 - \$0.37$

Solve. Show your work.

18. Tennis balls come 3 to a can. If each can sells for about \$3.95, how much would 6 cans cost?

19. Lucy bought a tennis outfit for \$29.95 and a new racket for \$48.50. Together what did these cost?

20. It takes 4 people to play "doubles" in tennis. A group of 28 players would require how many courts to play doubles matches all at one time?

21. The Schroeders paid \$120 for family tennis lessons. Later \$35 was returned for cancelled lessons. What was the final cost?

22. A set in the school tennis tournament may have as few as 6 games and as many as 11. What is the greatest number of games possible for a match of 5 sets?

23. When the tennis weekend was over, 135 matches had been played on Saturday and 257 had been played on Sunday. How many matches were played on the weekend?

## Using Decimals to Show Wholes and Tenths

Write the decimal.

- |                                |               |                      |
|--------------------------------|---------------|----------------------|
| 1. twelve and four-tenths 12.4 | 2. two-tenths | 3. six and one-tenth |
|--------------------------------|---------------|----------------------|

Write the words.

- |                             |        |        |
|-----------------------------|--------|--------|
| 4. 4.9 four and nine-tenths | 5. 0.4 | 6. 1.6 |
|-----------------------------|--------|--------|

Write the decimal.

- |                          |                               |
|--------------------------|-------------------------------|
| 7. nine and seven-tenths | 8. nine-tenths                |
| 9. five and six-tenths   | 10. two and five-tenths       |
| 11. three-tenths         | 12. fourteen and eight-tenths |

Write the words.

- |         |         |         |
|---------|---------|---------|
| 13. 3.2 | 14. 0.1 | 15. 8.8 |
|---------|---------|---------|

## Using Decimals to Show Wholes and Hundredths

Write the decimal.

- |                                     |                           |
|-------------------------------------|---------------------------|
| 1. one and eighteen-hundredths 1.18 | 2. forty-six hundredths   |
| 3. five-hundredths                  | 4. ten and two-hundredths |

Write the words.

- |                                       |         |         |
|---------------------------------------|---------|---------|
| 5. 2.59 two and fifty-nine hundredths | 6. 1.06 | 7. 0.25 |
|---------------------------------------|---------|---------|

Write the decimal.

- |                                    |                                 |
|------------------------------------|---------------------------------|
| 8. six and seventy-nine hundredths | 9. one and ten-hundredths       |
| 10. two-hundredths                 | 11. four and sixteen-hundredths |
| 12. two and seven-hundredths       | 13. fifty-five hundredths       |

Write the words.

- |          |          |          |
|----------|----------|----------|
| 14. 3.18 | 15. 0.92 | 16. 5.01 |
|----------|----------|----------|



## Relating Hundredths and Tenths

Complete the chart.

Using tenths

Using hundredths

1. <u>2.1</u> <u>two and one-tenth</u>	<u>2.10</u> <u>two and ten-hundredths</u>
2. <u>0.4</u> _____	<u>0.40</u> _____
3. <u>3.8</u> _____	_____
4. _____	<u>1.50</u> _____
5. <u>0.2</u> _____	_____
6. _____	<u>2.90</u> _____
7. <u>1.7</u> _____	_____
8. _____	<u>0.30</u> _____
9. <u>4.6</u> _____	_____

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## Decimals and Money

Give the value of each.

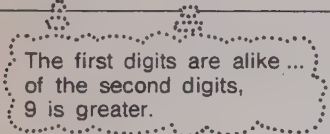
dollars | dimes | pennies | value

dollars | dimes | pennies | value

1. 3      2      16 <u>\$ 3.36</u>	2. 3      13      1 <u>\$4.</u>
3. 0      16      8      _____	4. 0      7      17      _____
5. 1      14      4      _____	6. 1      2      12      _____
7. 3      11      5      _____	8. 1      12      14      _____
9. 0      9      10      _____	10. 0      15      11      _____
11. 2      18      10      _____	12. 5      9      19      _____
13. 1      0      5      _____	14. 4      10      10      _____
15. 3      9      12      _____	16. 1      17      18      _____

## Comparing and Ordering Decimals

Which is greater,

1. 1.79 or 1.97 ? 1.97	2. 3.7 or 2.8 ?	3. 0.75 or 0.77 ?
	4. 5.4 or 5.5 ?	5. 65.4 or 6.54 ?
	6. 0.28 or 0.82 ?	7. 2.89 or 2.9 ?

Which is less,

8. 0.06 or 0.6 ?      9. 2.9 or 2.10 ?      10. 6.5 or 6.07 ?

List from least to greatest.

11. 0.01, 1.1, 1.0, 0.1      12. 3.3, 3.15, 3.14, 13.1      13. 1.02, 1.3, 1.22, 1.20

List from greatest to least.

14. 1.8, 1.18, 0.88, 1.81      15. 2.07, 2.7, 0.27, 2.77      16. 3.26, 32.6, 2.26, 22.6

## Adding Decimals

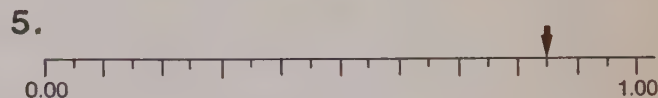
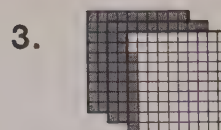
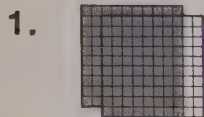
Add.

1. $\begin{array}{r} 2.87 \\ 5.43 \\ \hline 8.30 \end{array}$	2. $\begin{array}{r} 2.49 \\ 4.82 \\ \hline \end{array}$	3. $\begin{array}{r} 12.19 \\ 53.05 \\ \hline \end{array}$	4. $5.62 + 3.18$
---	--	--	------------------

5. 
$$\begin{array}{r} 3.25 \\ 3.67 \\ \hline \end{array}$$
      6. 
$$\begin{array}{r} 1.95 \\ 6.44 \\ \hline \end{array}$$
      7. 
$$\begin{array}{r} 63.5 \\ 24.5 \\ \hline \end{array}$$
      8. 
$$\begin{array}{r} 7.69 \\ 0.51 \\ \hline \end{array}$$
      9. 
$$\begin{array}{r} 2.7 \\ 2.6 \\ \hline \end{array}$$
10. 
$$\begin{array}{r} 4.87 \\ 0.34 \\ \hline \end{array}$$
      11. 
$$\begin{array}{r} 4.5 \\ 2.9 \\ \hline \end{array}$$
      12. 
$$\begin{array}{r} 5.69 \\ 1.49 \\ \hline \end{array}$$
      13. 
$$\begin{array}{r} 3.84 \\ 6.73 \\ \hline \end{array}$$
      14. 
$$\begin{array}{r} 1.95 \\ 7.32 \\ \hline \end{array}$$
15.  $33.67 + 9.87$       16.  $34.1 + 16.8$       17.  $31.78 + 24.42$

## Practice

Write a decimal to match each picture.



Write the decimal.

6. two-tenths

7. eighty-seven hundredths

8. one and three-tenths

9. four and one-hundredth

Write the words.

10. 0.5

11. 4.26

12. 2.6

13. 0.07

Write each as a two-place decimal.

Write each as a one-place decimal.

14. 6.7

15. 0.9

16. 14.30

17. 0.10

Complete.

18. 0.27 shows \_\_\_\_ tenths \_\_\_\_ hundredths, or \_\_\_\_ hundredths.

19. 4 dollars 12 dimes are worth \$\_\_\_\_.

20. 1 dollar 4 dimes 18 pennies are worth \$\_\_\_\_.

21. 15 dimes 16 pennies are worth \$\_\_\_\_.

Which is greater,

22. 1.2 or 1.6?

23. 2.30 or 2.03?

24. 0.9 or 0.3?

25. 4.20 or 4.22?

List from least to greatest.

List from greatest to least.

26. 0.94, 1.49, 0.49, 0.99

27. 3.33, 3.63, 0.66, 3.36

Add.

28. 
$$\begin{array}{r} 1.8 \\ + 2.6 \\ \hline \end{array}$$

29. 
$$\begin{array}{r} 6.36 \\ + 1.35 \\ \hline \end{array}$$

30. 
$$\begin{array}{r} 2.6 \\ + 5.4 \\ \hline \end{array}$$

31. 
$$\begin{array}{r} 2.67 \\ + 5.59 \\ \hline \end{array}$$

32. 
$$\begin{array}{r} 1.83 \\ + 0.67 \\ \hline \end{array}$$

33.  $8.6 + 0.8$

34.  $4.84 + 3.17$

35.  $6.95 + 1.08$



## Subtracting Decimals

Subtract.

1. $\begin{array}{r} 6.94 \\ - 4.58 \\ \hline 2.36 \end{array}$	2. $\begin{array}{r} 84.5 \\ - 16.9 \\ \hline 6 \end{array}$	3. $\begin{array}{r} \$70.00 \\ - 35.81 \\ \hline \end{array}$	4. $8.60 - 7.35$
---	--	--	------------------

- |   |  |  |  |   |
|---|--|--|--|---|
| 5. $\begin{array}{r} 7.93 \\ - 5.48 \\ \hline \end{array}$      | 6. $\begin{array}{r} 30.01 \\ - 24.72 \\ \hline \end{array}$ | 7. $\begin{array}{r} \$56.39 \\ - 47.93 \\ \hline \end{array}$ | 8. $\begin{array}{r} 50.0 \\ - 36.9 \\ \hline \end{array}$ | 9. $\begin{array}{r} 84.96 \\ - 36.38 \\ \hline \end{array}$  |
| 10. $\begin{array}{r} \$80.64 \\ - 63.59 \\ \hline \end{array}$ | 11. $\begin{array}{r} 9.64 \\ - 2.93 \\ \hline \end{array}$  | 12. $\begin{array}{r} 70.50 \\ - 61.56 \\ \hline \end{array}$  | 13. $\begin{array}{r} 7.3 \\ - 5.7 \\ \hline \end{array}$  | 14. $\begin{array}{r} 43.61 \\ - 25.68 \\ \hline \end{array}$ |
| 15. $10.2 - 6.4$  | 16. $\$10.15 - \$2.51$                                       | 17. $3.81 - 1.44$  |  |   |

## Multiplying Decimal Tenths and Whole Numbers

Multiply.

1. $\begin{array}{r} 0.8 \\ \times 4 \\ \hline 3.2 \end{array}$ <small>4 x 8 tenths = 32 tenths</small>	2. $\begin{array}{r} 0.7 \\ \times 5 \\ \hline \end{array}$ <small>5 x 7 tenths</small>	3. $\begin{array}{r} 0.6 \\ \times 3 \\ \hline \end{array}$	4. $6 \times 0.5$
--	--	---	-------------------

- |  |  |  |  |  |
|--|--|--|--|--|
| 5. $\begin{array}{r} 0.5 \\ \times 3 \\ \hline \end{array}$  | 6. $\begin{array}{r} 0.4 \\ \times 9 \\ \hline \end{array}$  | 7. $\begin{array}{r} 0.4 \\ \times 7 \\ \hline \end{array}$  | 8. $\begin{array}{r} 0.8 \\ \times 5 \\ \hline \end{array}$  | 9. $\begin{array}{r} 0.8 \\ \times 2 \\ \hline \end{array}$  |
| 10. $\begin{array}{r} 0.4 \\ \times 4 \\ \hline \end{array}$ | 11. $\begin{array}{r} 0.7 \\ \times 9 \\ \hline \end{array}$ | 12. $\begin{array}{r} 0.8 \\ \times 8 \\ \hline \end{array}$ | 13. $\begin{array}{r} 0.6 \\ \times 6 \\ \hline \end{array}$ | 14. $\begin{array}{r} 0.5 \\ \times 2 \\ \hline \end{array}$ |
| 15. $3 \times 0.9$   | 16. $7 \times 0.2$   | 17. $9 \times 0.8$   | 18. $8 \times 0.3$   |  |

## Multiplying One-Place Decimals

Multiply.

1. $\begin{array}{r} 3.7 \\ \times 4 \\ \hline 14.8 \end{array}$	2. $\begin{array}{r} 4.6 \\ \times 2 \\ \hline \end{array}$	3. $\begin{array}{r} 5.7 \\ \times 3 \\ \hline \end{array}$	4. $2.3 \times 7$
--	---	---	-------------------

$$\begin{array}{r} 2.9 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 4.6 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9.3 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5.1 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 7.6 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4.8 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 7.5 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9.7 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 6.2 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 5.7 \\ \times 8 \\ \hline \end{array}$$

$$15. \ 5 \times 1.2$$

$$16. \ 6 \times 3.6$$

$$17. \ 4 \times 9.2$$

$$18. \ 6 \times 8.4$$

$$19. \ 9 \times 3.8$$

$$20. \ 5 \times 4.9$$

## Rounding Decimal Tenths to Whole Numbers

Round to the nearest whole number.

1. 3.2	2. 6.8	3. 4.5	4. 9.9	5. 2.6
--------	--------	--------	--------	--------

$$6. \ 7.1$$

$$7. \ 5.6$$

$$8. \ 0.9$$

$$9. \ 3.7$$

$$10. \ 1.1$$

$$11. \ 6.2$$

$$12. \ 8.8$$

$$13. \ 5.9$$

$$14. \ 8.5$$

$$15. \ 14.2$$

$$16. \ 12.9$$

$$17. \ 0.5$$

$$18. \ 9.7$$

$$19. \ 8.6$$

$$20. \ 0.7$$

Round each to the nearest whole number of litres, kilometres, or kilograms.

$$21. \ 7.3 \text{ km}$$

$$22. \ 1.5 \text{ L}$$

$$23. \ 3.4 \text{ kg}$$

$$24. \ 2.8 \text{ L}$$

$$25. \ 4.9 \text{ km}$$

$$26. \ 6.4 \text{ L}$$

$$27. \ 5.1 \text{ kg}$$

$$28. \ 4.3 \text{ L}$$

$$29. \ 9.5 \text{ km}$$

$$30. \ 7.6 \text{ kg}$$

$$31. \ 0.8 \text{ km}$$

$$32. \ 8.2 \text{ kg}$$

## Rounding Addends to Estimate the Sum

Round each addend to the nearest whole number.  
Then add to estimate the sum.

1. $\begin{array}{r} 3.6 \\ 4.1 \\ \hline \end{array}$ $\begin{array}{r} 4 \\ 4 \\ \hline 8 \end{array}$	2. $\begin{array}{r} 1.7 \\ 8.9 \\ \hline \end{array}$ 2	3. $\begin{array}{r} 2.3 \\ 7.8 \\ \hline \end{array}$	4. $\begin{array}{r} 6.5 \\ 4.5 \\ \hline \end{array}$
--	--	--	--

$$\begin{array}{r} 5. \ 1.9 \\ 1.1 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \ 6.5 \\ 7.8 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \ 1.0 \\ 9.9 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \ 5.4 \\ 8.7 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \ 1.2 \\ 3.2 \\ \hline 9.8 \end{array}$$

$$\begin{array}{r} 10. \ 6.3 \\ 1.3 \\ \hline 3.5 \end{array}$$

$$\begin{array}{r} 11. \ 8.7 \\ 2.3 \\ \hline 2.9 \end{array}$$

$$\begin{array}{r} 12. \ 4.6 \\ 2.4 \\ \hline 3.3 \end{array}$$

$$13. \ 4.6 + 4.7$$

$$14. \ 5.6 + 2.1$$

$$15. \ 1.3 + 8.9 + 2.7$$

## Rounding Factors to Estimate the Product

Round to the nearest whole number.  
Then multiply to estimate the product.

1. $\begin{array}{r} 2.1 \\ 3 \\ \hline \end{array}$ $\begin{array}{r} 2 \\ 3 \\ \hline 6 \end{array}$	2. $\begin{array}{r} 7.8 \\ 8 \\ \hline \end{array}$ 8	3. $\begin{array}{r} 5.6 \\ 5 \\ \hline \end{array}$	4. $\begin{array}{r} 3.4 \\ 6 \\ \hline \end{array}$
--	--	--	--

$$\begin{array}{r} 5. \ 1.6 \\ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \ 6.7 \\ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \ 9.1 \\ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \ 4.3 \\ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \ 5.9 \\ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \ 19.9 \\ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \ 4.5 \\ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \ 13.8 \\ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \ 32.3 \\ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \ 6.5 \\ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \ 15.2 \\ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 16. \ 26.7 \\ 7 \\ \hline \end{array}$$



**Practice**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 849 \\ 103 \\ + 224 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 183 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 1102 \\ - 526 \\ \hline \end{array}$$

$$4. \quad 7 \overline{)420}$$

$$\begin{array}{r} 5. \quad 6.3 \\ + 7.8 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 7.3 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad \$8.17 \\ - 3.52 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 2.71 \\ + 6.38 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 68 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 8.0 \\ - 2.4 \\ \hline \end{array}$$

$$11. \quad 120 \div 4$$

$$12. \quad 6 \times 4.7$$

$$13. \quad 9.31 - 5.47$$

$$14. \quad \$8.61 + \$5.08$$

$$15. \quad 7 \times 0.8$$

$$16. \quad 3 \times 5 \times 7 \times 2$$

Solve. Show your work.

17. The mower can hold 2.3 L of fuel in its tank. Right now it has 0.5 L. How much fuel is needed to fill the tank?

18. One lap on the track is 0.6 km. Kevin runs 6 laps. How far has he run?

19. The road to York is 120 km long. The painting crew plans to paint the centre lines in 4 equal sections, with each crew member changing jobs for each section. How long will each section be?

20. Paint for the fence cost \$18.46. The painter charged \$40 plus \$2.75 for other expenses. How much did it cost to paint the fence?

21. The auditorium holds 435 people. The school filled it for all 3 performances of the play. How many people attended?

22. The land surveyor says the curved path to town is 3.14 km and the straight path is 2.87 km. How much longer is the curved path?


NAME \_\_\_\_\_

SPM4/U9/204-205

## Measuring and Estimating in Centimetres

Use a centimetre ruler. Estimate first. Then measure the length to the nearest centimetre.

Read the ruler.

1.		Estimate <u>5 cm</u>	Measurement _____
2.	_____	Est. _____	Meas. _____
3.	_____	Est. _____	Meas. _____
4.	_____	Est. _____	Meas. _____
5. your pencil	6. your thumb	7. your shoe	
Est. _____ Meas. _____	Est. _____ Meas. _____	Est. _____ Meas. _____	
8. the width of your hand	9. the width of your ruler	10. the height of your ankle	
Est. _____ Meas. _____	Est. _____ Meas. _____	Est. _____ Meas. _____	

SPM4/U9/206

## Decimetres, Centimetres, and Decimals

Complete.

1. 5 cm = <u>0.5</u> dm <u>1 cm = 0.1 dm</u>	2. 4 dm = _____ cm <u>1 dm = 10 cm</u>	3. 15 cm = _____ dm
---	---	---------------------

4. 2.7 dm = _____ cm	5. 0.9 dm = _____ cm	6. 11 cm = _____ dm
7. 2 cm = _____ dm	8. 2.3 dm = _____ cm	9. 3 dm = _____ cm

Use a ruler. Estimate first. Then measure each.

10. the width of this page	11. the length of this page
Estimate: _____ dm or _____ cm	Estimate: _____ dm or _____ cm
Measurement: _____ dm or _____ cm	Measurement: _____ dm or _____ cm
12. the height of your knee	13. the length from elbow to fingertip
Estimate: _____ dm or _____ cm	Estimate: _____ dm or _____ cm
Measurement: _____ dm or _____ cm	Measurement: _____ dm or _____ cm

## Metres, Centimetres, and Decimals

Complete.

1. $135 \text{ cm} = \underline{1.35} \text{ m}$ $100 \text{ cm} = 1 \text{ m}$	2. $0.68 \text{ m} = \underline{\quad} \text{ cm}$ $0.01 \text{ m} = 1 \text{ cm}$
3. $89 \text{ cm} = \underline{\quad} \text{ m}$	4. $1.7 \text{ m} = \underline{\quad} \text{ cm}$
5. $2.07 \text{ m} = \underline{\quad} \text{ cm}$	6. $300 \text{ cm} = \underline{\quad} \text{ m}$
7. $170 \text{ cm} = \underline{\quad} \text{ m}$	8. $0.8 \text{ m} = \underline{\quad} \text{ cm}$
9. $3 \text{ m} = \underline{\quad} \text{ cm}$	10. $55 \text{ cm} = \underline{\quad} \text{ m}$

Measure each in centimetres. Then give each length in metres.

- |  |   |
|--|---|
| 11. your height                                  | 12. the classroom door                          |
| 13. how far you can step                         | 14. how far you can hop                         |
| 15. from the floor to the base of the chalkboard | 16. from the floor to the top of the chalkboard |

SPM4/U9/208-209

## Metres, Decimetres, Centimetres, and Decimals

Complete.

1. $115 \text{ cm} = \underline{11.5} \text{ dm or } \underline{1.15} \text{ m}$	2. $72 \text{ dm} = \underline{720} \text{ cm or } \underline{\quad} \text{ m}$
3. $3.2 \text{ m} = \underline{\quad} \text{ cm or } \underline{\quad} \text{ dm}$	4. $85 \text{ cm} = \underline{\quad} \text{ dm or } \underline{\quad} \text{ m}$
5. $4.7 \text{ dm} = \underline{\quad} \text{ cm or } \underline{\quad} \text{ m}$	6. $7 \text{ m} = \underline{\quad} \text{ cm or } \underline{\quad} \text{ dm}$
7. $150 \text{ cm} = \underline{\quad} \text{ dm or } \underline{\quad} \text{ m}$	8. $12.6 \text{ dm} = \underline{\quad} \text{ cm or } \underline{\quad} \text{ m}$
9. $0.62 \text{ m} = \underline{\quad} \text{ cm or } \underline{\quad} \text{ dm}$	10. $8 \text{ dm} = \underline{\quad} \text{ cm or } \underline{\quad} \text{ m}$
11. $0.4 \text{ m} = \underline{\quad} \text{ cm or } \underline{\quad} \text{ dm}$	12. $70 \text{ cm} = \underline{\quad} \text{ dm or } \underline{\quad} \text{ m}$
13. $4.3 \text{ m} = \underline{\quad} \text{ cm or } \underline{\quad} \text{ dm}$	14. $200 \text{ cm} = \underline{\quad} \text{ dm or } \underline{\quad} \text{ m}$
15. $5.7 \text{ dm} = \underline{\quad} \text{ cm or } \underline{\quad} \text{ m}$	16. $50 \text{ dm} = \underline{\quad} \text{ cm or } \underline{\quad} \text{ m}$
17. $125 \text{ cm} = \underline{\quad} \text{ dm or } \underline{\quad} \text{ m}$	18. $2 \text{ m} = \underline{\quad} \text{ cm or } \underline{\quad} \text{ dm}$



## Kilometres and Metres

Complete.

1. 3000 m = <u>3</u> km 1000 m = 1 km	2. 4.2 km = <u>4</u> m
3. 8 km = _____ m	4. 1700 m = _____ km

- |                       |                      |
|-----------------------|----------------------|
| 5. 980 m = _____ km   | 6. 3.7 km = _____ m  |
| 7. 5070 m = _____ km  | 8. 0.6 km = _____ m  |
| 9. 2.12 km = _____ m  | 10. 100 m = _____ km |
| 11. 3200 m = _____ km | 12. 0.8 km = _____ m |

How many kilometres is it?

- |                              |                        |
|------------------------------|------------------------|
| 13. Joe climbed to 12 000 m. | 14. Sheila ran 3500 m. |
|------------------------------|------------------------|

How many metres is it?

- |                      |                                   |
|----------------------|-----------------------------------|
| 15. We hiked 4.6 km. | 16. The parachutist fell 1.25 km. |
|----------------------|-----------------------------------|

## Choosing a Unit of Length

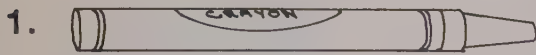
Which unit, the kilometre, the metre, or the centimetre, would you use to measure each of these?

1. length of a tennis court metre	2. diameter of a hockey puck	3. height of a house
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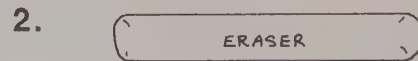
- |                                |                                       |   |
|--------------------------------|---------------------------------------|---|
| 4. length of a highway         | 5. length of a hallway                | 6. length of a shoelace                 |
| 7. height of your ankle        | 8. height of an airplane              | 9. height of a space satellite          |
| 10. distance to the next town  | 11. distance to the drinking fountain | 12. distance from your lip to your chin |
| 13. distance around your wrist | 14. distance around a soccer field    | 15. distance around the world           |

## Practice

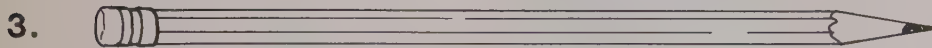
Use a centimetre ruler. Estimate first.  
Then measure the length to the nearest centimetre.



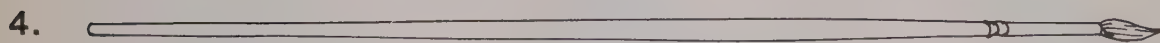
Estimate \_\_\_\_\_ Measurement \_\_\_\_\_



Est. \_\_\_\_\_ Meas. \_\_\_\_\_



Est. \_\_\_\_\_ Meas. \_\_\_\_\_



Est. \_\_\_\_\_ Meas. \_\_\_\_\_

5. the height of your chair seat

Est. \_\_\_\_\_ Meas. \_\_\_\_\_

6. the width of this book

Est. \_\_\_\_\_ Meas. \_\_\_\_\_

Complete.

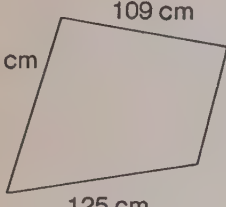
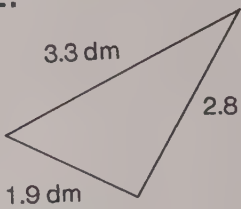
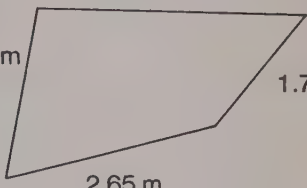
- |                       |                       |                      |
|-----------------------|-----------------------|----------------------|
| 7. 70 m = _____ cm    | 8. 48 cm = _____ dm   | 9. 43 dm = _____ m   |
| 10. 3.5 dm = _____ cm | 11. 6 m = _____ dm    | 12. 0.8 km = _____ m |
| 13. 70 cm = _____ m   | 14. 0.38 m = _____ cm | 15. 70 dm = _____ m  |
| 16. 0.9 dm = _____ cm | 17. 3500 m = _____ km | 18. 70 cm = _____ dm |
| 19. 1.2 m = _____ cm  | 20. 600 cm = _____ m  | 21. 800 m = _____ km |
| 22. 510 cm = _____ m  | 23. 0.9 m = _____ dm  | 24. 70 km = _____ m  |

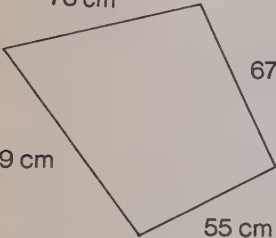
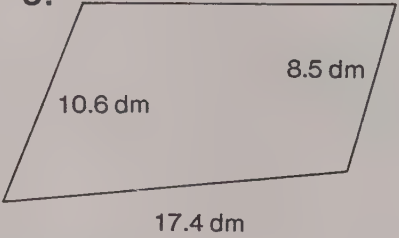
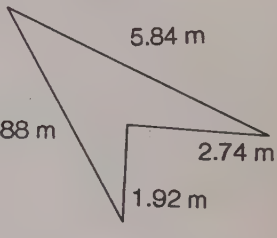
Which unit, the centimetre, the metre, or the kilometre, would be best for measuring each of these?

- |                                 |                                  |                                 |
|---------------------------------|----------------------------------|---------------------------------|
| 25. a gerbil                    | 26. a row boat                   | 27. an airplane trip            |
| 28. the border of your province | 29. a wallet                     | 30. a rocket for a space launch |
| 31. how far a car travels       | 32. how far you can throw a ball | 33. how high you can reach      |

## Finding the Perimeter

Find the perimeter of each.

<p><b>1.</b></p>  <div style="float: right; text-align: right;"> <math display="block">\begin{array}{r} 13 \\ 109 \\ 78 \\ 125 \\ 119 \\ \hline 431 \end{array}</math> </div> <p style="text-align: right; margin-top: 10px;">431 cm</p>	<p><b>2.</b></p>  <div style="float: right; text-align: right;"> <math display="block">\begin{array}{r} 3.3 \\ 2.8 \\ 1.9 \\ \hline \end{array}</math> </div>	<p><b>3.</b></p> 
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<p><b>4.</b></p> 	<p><b>5.</b></p> 	<p><b>6.</b></p> 
--	--	--

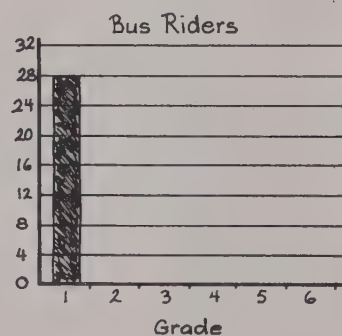
## Graphing

For this information,

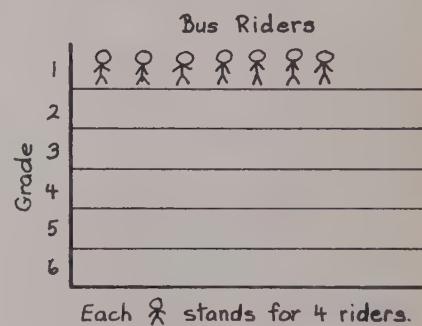
Number of students  
who ride a bus

Grade 1	28
Grade 2	20
Grade 3	24
Grade 4	32
Grade 5	16
Grade 6	12

1. draw a bar graph.



2. draw a pictograph.



Use other paper.

3. Draw a bar graph and a pictograph.

Number of books read

Grade 1	5
Grade 2	5
Grade 3	10
Grade 4	20
Grade 5	25
Grade 6	30

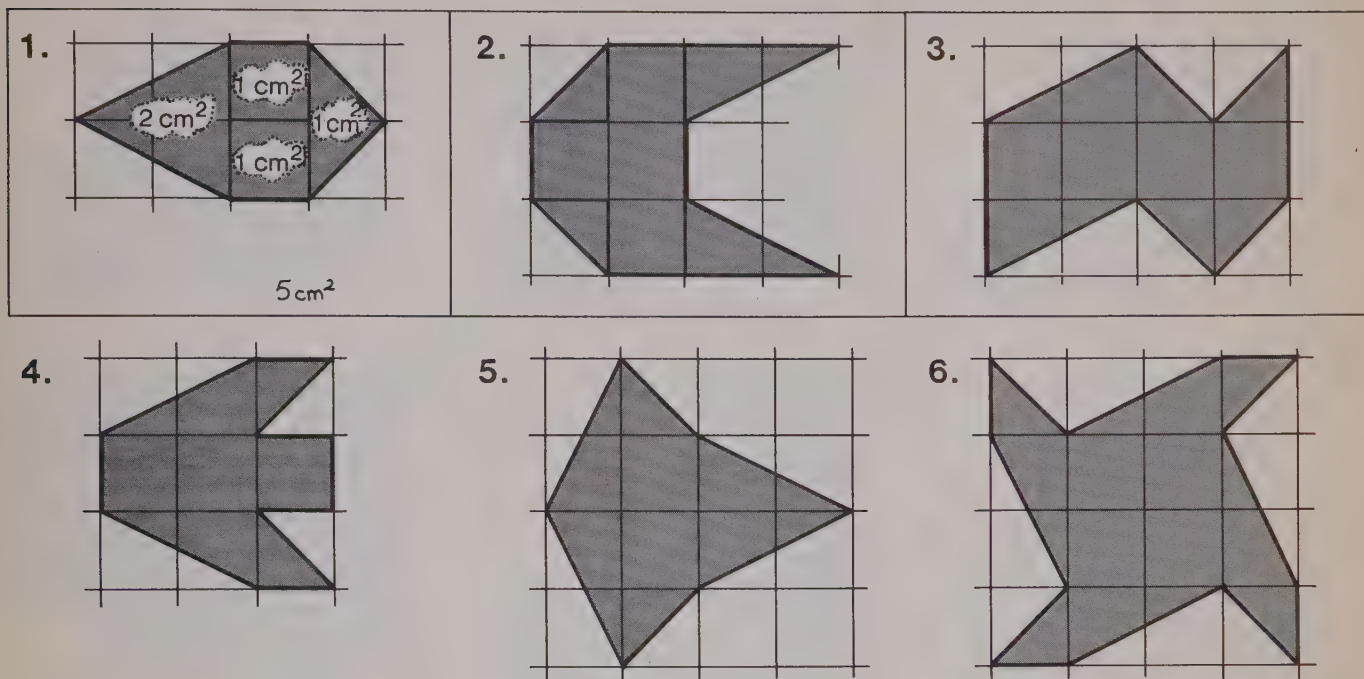
4. Draw a bar graph and a pictograph.

Number in each class

Grade 1	30
Grade 2	24
Grade 3	30
Grade 4	42
Grade 5	36
Grade 6	30

## Area in Square Centimetres

Give each area in square centimetres.



## Practice

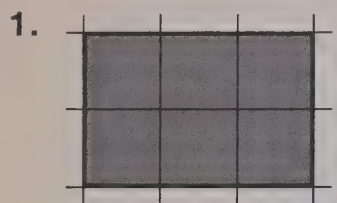
Solve. Show your work.

- Many small boats turned out to watch the 3 d of racing. The patrol boat saw there were 115 boats on Friday, 220 on Saturday, and 316 on Sunday. How many were there in all?
- The propellar shaft is 3.75 cm in diameter. The hole in the bearing is only 3.17 cm in diameter. How much must the machinist remove from the shaft for it to fit in the bearing?
- New cleats for the boat cost \$7.68 each. Five are needed. How much will they cost?
- Ian's father bought a used sail boat for \$3150. He spent \$1280 fixing it up. What was his total cost?
- The sailing club lays out a triangular course. The lengths of the parts are 1.7 km, 2.9 km, and 2.3 km. What is the distance around the course?
- T-shirts with the boat club flag cost \$5.85. Each of the 3 Boynton children bought one. How much did they spend?

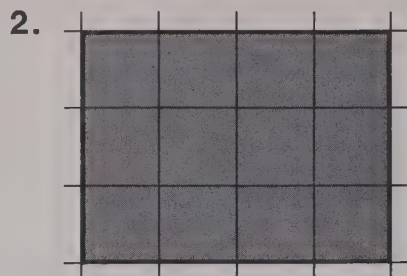


## Using Multiplication to Find Area

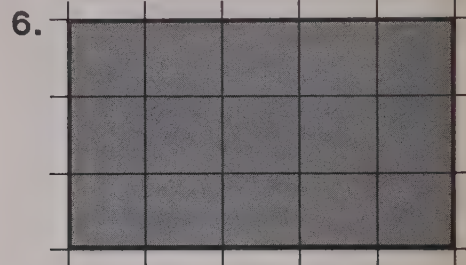
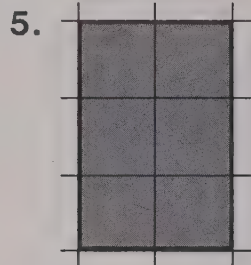
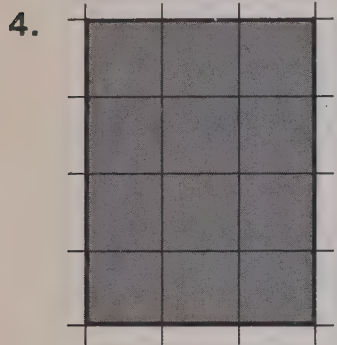
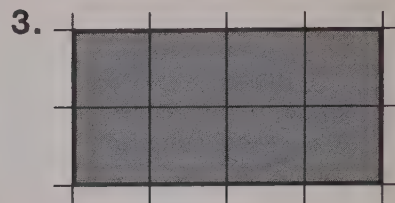
Write two multiplication sentences that give the area of each shape.



$$2 \times 3 = 6, 3 \times 2 = 6, 6 \text{ cm}^2$$



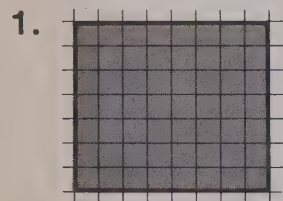
$$3 \times 4 = 12,$$



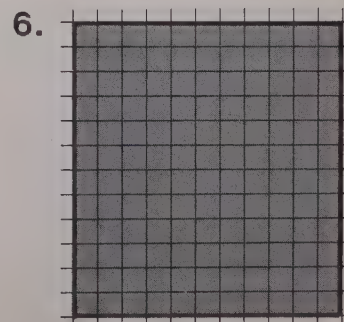
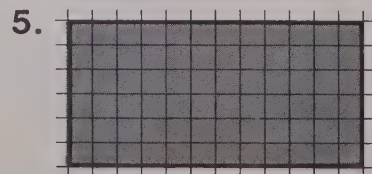
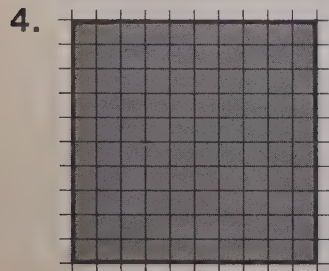
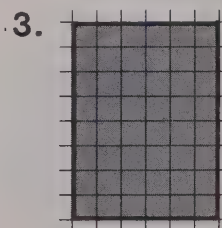
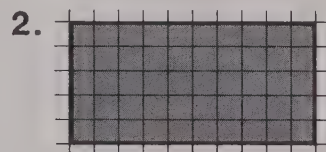
SPM4/U9/220

## Area in Square Decimetres and Square Metres

Each square represents  $1 \text{ m}^2$ . What is the area of the shape?



$$7 \times 8 = 56 \quad 56 \text{ m}^2$$



## Volume in Cubic Centimetres

Find the volume in cubic centimetres.

<p>1.</p> <p>17 cm<sup>3</sup></p>	<p>2.</p> <p></p>	<p>3.</p> <p></p>
<p>4.</p> <p></p>	<p>5.</p> <p></p>	<p>6.</p> <p></p>

## Practice

Solve. Show your work.

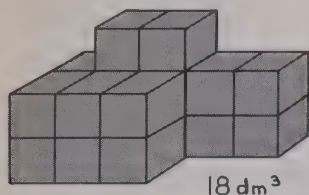
1. The truck had a mass of 2150 kg when empty, and 3278 kg when fully loaded. How heavy was the load?
2. What is the perimeter of the Johnson's terrace, if two of the sides are 8.3 m and the other two are 5.9 m?
3. Ray's kitten is seven months old today. Four of the months had 31 d. Three had 30 d. How many days old is the kitten?
4. At a special sale, each tape cassette cost \$3.39. Tequi bought three. Lola bought two. Together, what did they pay?
5. The forester has 210 trees to set out in 7 long rows. How many trees should go in each row?
6. A carton contains 3 boxes. Each box contains 6 tins. Each tin contains 8 cookies. How many cookies are in the carton?



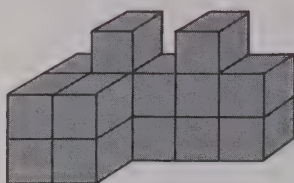
## Volume in Cubic Decimetres

Each little cube represents  $1 \text{ dm}^3$ .  
Find the volume of each solid.

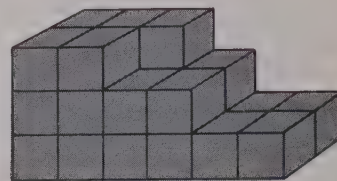
1.



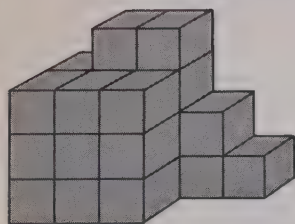
2.



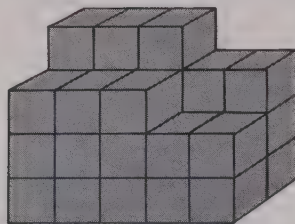
3.



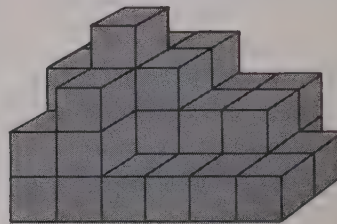
4.



5.



6.



Is it smaller or larger than a cubic decimetre?

7. a soccer ball

8. a Rubik's Cube™

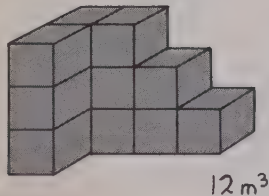
9. a shoe box

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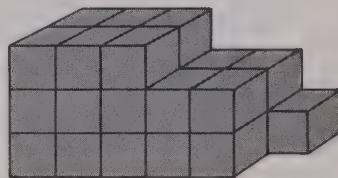
## Volume in Cubic Metres

Each little cube represents  $1 \text{ m}^3$ .  
Find the volume of each solid.

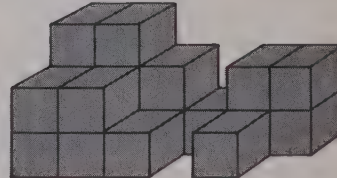
1.



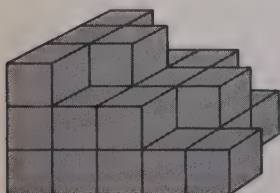
2.



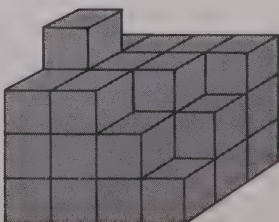
3.



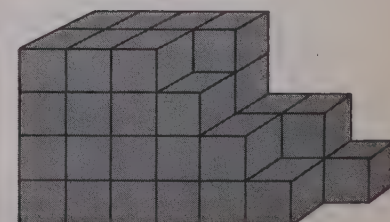
4.



5.



6.



Is it smaller or larger than a cubic metre?

7. your kitchen

8. the kitchen oven

9. the refrigerator

**Practice**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 816 \\ 273 \\ + 549 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 7.61 \\ - 3.72 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 637 \\ \times 3 \\ \hline \end{array}$$

$$4. \quad 6 \overline{)420}$$

$$\begin{array}{r} 5. \quad \$9.02 \\ - 3.65 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 0.8 \\ \times 6 \\ \hline \end{array}$$

$$7. \quad 9 \overline{)54}$$

$$\begin{array}{r} 8. \quad \$7.35 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 6.19 \\ + 7.33 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 2002 \\ - 714 \\ \hline \end{array}$$

$$11. \quad 7 \times (46 + 31)$$

$$12. \quad 3 \times 8 \times 9$$

$$13. \quad 6.80 - 4.17$$

$$14. \quad 640 \div 8$$

$$15. \quad 63 + 2140 + 832$$

$$16. \quad 8 \times 4.2$$

Solve. Show your work.

17. The quilt was made by sewing 5 rows of squares with 8 squares in each row. How many squares were used in the quilt?

18. The 4 Maguire sisters agree to share equally the 280 newspapers they have to deliver. How many will each have?

19. When Sian chose from the menu, she picked an appetizer for \$1.25. Her main course cost \$4.85. Her dessert cost \$1.10. What was the price of her meal?

20. Nigel began the day with \$7.35. By noon he had spent \$2.80 on food. During the afternoon he spent \$1.54 for magazines. How much did he have at the end of the day?

21. A shelf had to hold 8 boxes of about 3.5 kg each. How many kilograms did the shelf have to hold?

22. The sides of the garden measure 17 m, 41 m, 18 m, and 30 m. What is the perimeter?



Multiplying Two-Digit Numbers

Multiply.

1. $\begin{array}{r} 37 \\ \times 5 \\ \hline 185 \end{array}$	2. $\begin{array}{r} 69 \\ \times 4 \\ \hline \end{array}$	3. $\begin{array}{r} 82 \\ \times 6 \\ \hline \end{array}$	4. $57 \times 3$	
5. $\begin{array}{r} 38 \\ \times 3 \\ \hline \end{array}$	6. $\begin{array}{r} 94 \\ \times 5 \\ \hline \end{array}$	7. $\begin{array}{r} 27 \\ \times 4 \\ \hline \end{array}$	8. $\begin{array}{r} 85 \\ \times 7 \\ \hline \end{array}$	9. $\begin{array}{r} 91 \\ \times 8 \\ \hline \end{array}$
10. $\begin{array}{r} 52 \\ \times 5 \\ \hline \end{array}$	11. $\begin{array}{r} 40 \\ \times 4 \\ \hline \end{array}$	12. $\begin{array}{r} 93 \\ \times 9 \\ \hline \end{array}$	13. $\begin{array}{r} 67 \\ \times 2 \\ \hline \end{array}$	14. $\begin{array}{r} 42 \\ \times 3 \\ \hline \end{array}$
15. $8 \times 28$		16. $6 \times 17$		17. $9 \times 74$

Practice

Solve. Show your work.

1. Rolf won the race in 12.8 s. Jorge was 1.3 s slower. How long did it take Jorge to run the race?

2. I can get 25 pennies for one quarter. How many pennies can I get for 7 quarters?
3. Sylvia bought 5 packages of hamburger. The labels showed that each package held 1.6 kg. How much hamburger did Sylvia buy?

4. The show costs \$4.25 for mom and \$1.75 for me. How much do we need so that we can go to the show?
5. Hart thought he had written about 3 paragraphs on each page, 6 pages for each chapter, and 12 chapters for the book. About how many paragraphs would this be for the book?

6. How many eggs are there in 9 dozen?

## Multiplying Three-Digit Numbers

Multiply.

1. $\begin{array}{r} 689 \\ \times 3 \\ \hline 2067 \end{array}$	2. $\begin{array}{r} 471 \\ \times 4 \\ \hline 84 \end{array}$	3. $\begin{array}{r} 459 \\ \times 2 \\ \hline \end{array}$	4. $\begin{array}{r} 405 \\ \times 7 \\ \hline \end{array}$	5. $\begin{array}{r} 356 \\ \times 5 \\ \hline \end{array}$
6. $\begin{array}{r} 835 \\ \times 4 \\ \hline \end{array}$	7. $\begin{array}{r} 703 \\ \times 3 \\ \hline \end{array}$	8. $\begin{array}{r} 593 \\ \times 8 \\ \hline \end{array}$	9. $\begin{array}{r} 610 \\ \times 6 \\ \hline \end{array}$	10. $\begin{array}{r} 176 \\ \times 9 \\ \hline \end{array}$
11. $\begin{array}{r} 527 \\ \times 6 \\ \hline \end{array}$	12. $\begin{array}{r} 719 \\ \times 7 \\ \hline \end{array}$	13. $\begin{array}{r} 296 \\ \times 4 \\ \hline \end{array}$	14. $\begin{array}{r} 384 \\ \times 9 \\ \hline \end{array}$	15. $\begin{array}{r} 209 \\ \times 5 \\ \hline \end{array}$
16. $\begin{array}{r} 274 \\ \times 8 \\ \hline \end{array}$	17. $\begin{array}{r} 145 \\ \times 3 \\ \hline \end{array}$	18. $\begin{array}{r} 687 \\ \times 2 \\ \hline \end{array}$	19. $\begin{array}{r} 823 \\ \times 7 \\ \hline \end{array}$	20. $\begin{array}{r} 349 \\ \times 6 \\ \hline \end{array}$

## Estimating Products

Round the two-digit factors to the nearest ten.  
Round the three-digit factors to the nearest hundred.  
Then multiply to estimate each product.

1. $\begin{array}{r} 78 \\ \times 4 \\ \hline \end{array}$ $\begin{array}{r} 80 \\ \times 4 \\ \hline 320 \end{array}$	2. $\begin{array}{r} 284 \\ \times 6 \\ \hline \end{array}$ $\begin{array}{r} 300 \\ \times 6 \\ \hline \end{array}$	3. $\begin{array}{r} 57 \\ \times 2 \\ \hline \end{array}$	4. $\begin{array}{r} 479 \\ \times 5 \\ \hline \end{array}$
5. $\begin{array}{r} 37 \\ \times 9 \\ \hline \end{array}$	6. $\begin{array}{r} 28 \\ \times 3 \\ \hline \end{array}$	7. $\begin{array}{r} 93 \\ \times 4 \\ \hline \end{array}$	8. $\begin{array}{r} 55 \\ \times 7 \\ \hline \end{array}$
9. $\begin{array}{r} 467 \\ \times 8 \\ \hline \end{array}$	10. $\begin{array}{r} 91 \\ \times 9 \\ \hline \end{array}$	11. $\begin{array}{r} 62 \\ \times 2 \\ \hline \end{array}$	12. $\begin{array}{r} 708 \\ \times 5 \\ \hline \end{array}$
13. $\begin{array}{r} 129 \\ \times 7 \\ \hline \end{array}$	14. $\begin{array}{r} 37 \\ \times 6 \\ \hline \end{array}$	15. $\begin{array}{r} 643 \\ \times 3 \\ \hline \end{array}$	16. $\begin{array}{r} 189 \\ \times 8 \\ \hline \end{array}$

**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} 13.91 \\ + 4.73 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} \$8.61 \\ - 3.43 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 7.6 \\ \times 5 \\ \hline \end{array}$$

4. 
$$7 \overline{)490}$$

5. 
$$\begin{array}{r} 12.07 \\ - 3.94 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} \$875 \\ \times 6 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 207 \\ 914 \\ + 683 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 5001 \\ - 426 \\ \hline \end{array}$$

9. 
$$8 \overline{)480}$$

10. 
$$\begin{array}{r} 348 \\ \times 6 \\ \hline \end{array}$$

11.  $3 \times (46 - 27)$

12.  $8 \times 3 \times 2 \times 7$

13.  $\$467 + \$219 + \$83$

14.  $27 \div 3$

15.  $9 \times 1.6$

16.  $4039 - 2777$

Solve. Show your work.

17. John found three good paperbacks at the book store. They cost \$2.25, \$1.95 and \$0.89. How much did all three cost?

18. An egg crate holds 8 layers, each with 72 eggs. How many eggs does the crate hold?

19. The tourist bureau gave 400 maps to Memorial School. The 8 classes will share them equally. How many will each class get?

20. When Lief put his toy train together, he used an engine which is 3.7 cm long and 3 cars each 2.9 cm long. How long is the train?

21. A bicycle tour was planned so that 1000 km would be travelled in 8 d. After 7 d, the bicyclists had travelled 775 km, having to stay indoors for one day because of bad weather. How many kilometres remained to be travelled?

22. Mr. Zitzlsperger has a chance to take his 4 children along on a business trip. Air fare for each would be \$128. How much would it cost to take the 4 children along?



## Multiplying Two-Digit Numbers by Multiples of Ten

Multiply.

<p>1. <math>\begin{array}{r} 35 \\ 80 \\ \hline 2800 \end{array}</math></p> <p><math>0 \times 35</math></p> <p><math>8 \text{ tens} \times 35 = 280 \text{ tens}</math></p>	<p>2. <math>\begin{array}{r} 62 \\ 30 \\ \hline 0 \end{array}</math></p> <p><math>0 \times 62</math></p> <p><math>3 \text{ tens} \times 62 = \underline{\hspace{1cm}} \text{ tens}</math></p>	<p>3. <math>\begin{array}{r} 48 \\ 50 \\ \hline \end{array}</math></p>	<p>4. <math>\begin{array}{r} 13 \\ 70 \\ \hline \end{array}</math></p>
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5. $\begin{array}{r} 47 \\ 20 \\ \hline \end{array}$	6. $\begin{array}{r} 28 \\ 60 \\ \hline \end{array}$	7. $\begin{array}{r} 73 \\ 40 \\ \hline \end{array}$	8. $\begin{array}{r} 85 \\ 30 \\ \hline \end{array}$	9. $\begin{array}{r} 98 \\ 80 \\ \hline \end{array}$
10. $\begin{array}{r} 24 \\ 40 \\ \hline \end{array}$	11. $\begin{array}{r} 63 \\ 90 \\ \hline \end{array}$	12. $\begin{array}{r} 56 \\ 60 \\ \hline \end{array}$	13. $\begin{array}{r} 79 \\ 70 \\ \hline \end{array}$	14. $\begin{array}{r} 87 \\ 50 \\ \hline \end{array}$

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## Multiplying Two-Digit Numbers by Two-Digit Numbers

Multiply.

<p>1. <math>\begin{array}{r} 26 \\ 37 \\ \hline 182 \\ 780 \\ \hline 962 \end{array}</math></p> <p><math>7 \times 26</math></p> <p><math>30 \times 26</math></p>	<p>2. <math>\begin{array}{r} 38 \\ 24 \\ \hline 152 \end{array}</math></p> <p><math>4 \times 38</math></p> <p><math>20 \times 38</math></p>	<p>3. <math>\begin{array}{r} 43 \\ 83 \\ \hline \end{array}</math></p>	<p>4. <math>\begin{array}{r} 59 \\ 19 \\ \hline \end{array}</math></p>	<p>5. <math>\begin{array}{r} 76 \\ 45 \\ \hline \end{array}</math></p>
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6. $\begin{array}{r} 17 \\ 36 \\ \hline \end{array}$	7. $\begin{array}{r} 85 \\ 19 \\ \hline \end{array}$	8. $\begin{array}{r} 38 \\ 47 \\ \hline \end{array}$	9. $\begin{array}{r} 46 \\ 25 \\ \hline \end{array}$	10. $\begin{array}{r} 72 \\ 34 \\ \hline \end{array}$
11. $\begin{array}{r} 80 \\ 68 \\ \hline \end{array}$	12. $\begin{array}{r} 95 \\ 23 \\ \hline \end{array}$	13. $\begin{array}{r} 48 \\ 35 \\ \hline \end{array}$	14. $\begin{array}{r} 63 \\ 52 \\ \hline \end{array}$	15. $\begin{array}{r} 47 \\ 79 \\ \hline \end{array}$

## Multiplying Three-Digit Numbers by Multiples of Ten

Multiply.

$\begin{array}{r} 1. \quad \overset{2}{7}84 \\ \quad \underline{30} \\ 23\,520 \end{array}$ <p><math>0 \times 784</math></p> <p><math>3 \text{ tens} \times 784</math></p>	$\begin{array}{r} 2. \quad 129 \\ \quad \underline{50} \\ \quad \quad 0 \end{array}$ <p><math>0 \times 129</math></p> <p><math>5 \text{ tens} \times 129</math></p>	$\begin{array}{r} 3. \quad 247 \\ \quad \underline{40} \end{array}$	$\begin{array}{r} 4. \quad 365 \\ \quad \underline{20} \end{array}$
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$\begin{array}{r} 5. \quad 826 \\ \quad \underline{70} \end{array}$	$\begin{array}{r} 6. \quad 247 \\ \quad \underline{60} \end{array}$	$\begin{array}{r} 7. \quad 758 \\ \quad \underline{50} \end{array}$	$\begin{array}{r} 8. \quad 489 \\ \quad \underline{40} \end{array}$	$\begin{array}{r} 9. \quad 718 \\ \quad \underline{90} \end{array}$
$\begin{array}{r} 10. \quad 924 \\ \quad \underline{80} \end{array}$	$\begin{array}{r} 11. \quad 316 \\ \quad \underline{60} \end{array}$	$\begin{array}{r} 12. \quad 639 \\ \quad \underline{30} \end{array}$	$\begin{array}{r} 13. \quad 107 \\ \quad \underline{80} \end{array}$	$\begin{array}{r} 14. \quad 517 \\ \quad \underline{70} \end{array}$

## Multiplying Three-Digit Numbers by Two-Digit Numbers

Multiply.

$\begin{array}{r} 1. \quad \overset{1}{3}14 \\ \quad \underline{29} \\ 2826 \\ \underline{6280} \\ 9106 \end{array}$ <p><math>9 \times 314</math></p> <p><math>20 \times 314</math></p>	$\begin{array}{r} 2. \quad 268 \\ \quad \underline{63} \\ 804 \end{array}$ <p><math>3 \times 268</math></p> <p><math>60 \times 268</math></p>	$\begin{array}{r} 3. \quad 492 \\ \quad \underline{17} \end{array}$	$\begin{array}{r} 4. \quad 856 \\ \quad \underline{26} \end{array}$
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$\begin{array}{r} 5. \quad 145 \\ \quad \underline{46} \end{array}$	$\begin{array}{r} 6. \quad 739 \\ \quad \underline{23} \end{array}$	$\begin{array}{r} 7. \quad 519 \\ \quad \underline{38} \end{array}$	$\begin{array}{r} 8. \quad 360 \\ \quad \underline{93} \end{array}$	$\begin{array}{r} 9. \quad 463 \\ \quad \underline{48} \end{array}$
$\begin{array}{r} 10. \quad 593 \\ \quad \underline{59} \end{array}$	$\begin{array}{r} 11. \quad 673 \\ \quad \underline{72} \end{array}$	$\begin{array}{r} 12. \quad 204 \\ \quad \underline{85} \end{array}$	$\begin{array}{r} 13. \quad 178 \\ \quad \underline{18} \end{array}$	$\begin{array}{r} 14. \quad 390 \\ \quad \underline{66} \end{array}$

**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} 305 \\ \times 7 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 3.9 \\ + 6.8 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 481 \\ \times 30 \\ \hline \end{array}$$

4. 
$$9 \overline{)36}$$

5. 
$$\begin{array}{r} \$10.08 \\ - 4.92 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 218 \\ 763 \\ + 495 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 28 \\ \times 65 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} \$12.97 \\ - 8.38 \\ \hline \end{array}$$

9. 
$$9 \overline{)540}$$

10. 
$$\begin{array}{r} 285 \\ \times 43 \\ \hline \end{array}$$

11.  $27 \times (238 - 146)$

12.  $8 \times 9 \times 3 \times 7$

13.  $40 \times 123$

14.  $810 \div 9$

15.  $2718 - 945$

16.  $\$486 + \$211 + \$573$

Solve. Show your work.

17. Three charter airplanes, each carrying 276 passengers, are leaving for a holiday in Montreal. How many passengers are on the airplanes?

18. Marcia went to the Fair with \$10.00. The train ticket cost \$2.47. The admission charge was \$1.50. How much did she have left to spend?

19. Mrs. Filippelli was given 45 ticket books for her classes. Each book has 12 tickets. How many tickets is this in all?

20. 300 boys and girls are going to visit Upper Canada Village. Each bus holds 50 people. How many buses are needed?

21. The house has 38 windows. Each window has 12 panes of glass. How many panes is this?

22. The three girls running the legs of the relay had the following times: 6.7 s, 5.9 s, and 6.3 s. What is the total of these times?

# Using Multiplication to Divide

Find the quotient and the remainder.

1. $\begin{array}{r} 5 \text{ R } 3 \\ 6 \overline{)33} \\ \underline{30} \phantom{0} \\ 3 \end{array}$ <div><math>6 \times 5</math></div>	2. $\begin{array}{r} 7 \\ 9 \overline{)68} \\ \underline{63} \phantom{0} \\ 5 \end{array}$ <div><math>9 \times 7</math></div>	3. $3 \overline{)20}$	4. $7 \overline{)38}$	
5. $4 \overline{)15}$	6. $8 \overline{)59}$	7. $2 \overline{)19}$	8. $5 \overline{)42}$	9. $8 \overline{)30}$
10. $4 \overline{)30}$	11. $7 \overline{)67}$	12. $9 \overline{)53}$	13. $6 \overline{)50}$	14. $5 \overline{)36}$

## Practice

Solve. Show your work.

1. Sixteen contestants are entered in each of the 8 divisions of the tournament. How many have entered the tournament?

2. The temperature in the electric furnace is 875°C. When it cools 180°, Professor O'Day will open it. At what temperature will it be then?
3. Curtis has to bicycle 1.8 km to visit Luke. From Luke's to Fran's it is 2.2 km. From Fran's to Jeremy's it is 1.7 km. How far must Curtis bicycle to visit all three friends?

4. The 63 student visitors from Mexico are to be carried from the airport in 9 vans. The same number are to be carried in each of the vans. How many should each van carry?
5. An excursion fare to Ireland is \$435 return. Mr. O'Leary bought 17 seats for his travel agency. What did this cost?

6. A full 747 airliner can carry 428 passengers. The smaller 727 carries only 144. How many more people can the 747 carry?



## Sharing Tens

Divide.

1. $\overset{30}{2}\overline{)60}$ $2 \times 3 \text{ tens} = 6 \text{ tens}$	2. $3\overline{)90}$ $3 \times \text{ \_\_\_\_\_\_ } \text{ tens} = 9 \text{ tens}$	3. $3\overline{)60}$	4. $6\overline{)60}$
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5.  $7\overline{)70}$

6.  $4\overline{)80}$

7.  $5\overline{)50}$

8.  $2\overline{)40}$

9.  $2\overline{)80}$

10.  $3\overline{)90}$

11.  $2\overline{)60}$

12.  $8\overline{)80}$

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## Sharing Tens and Ones

Divide.

1. $\overset{20}{4}\overline{)84}$ $\begin{array}{r} 20 \\ 4 \overline{)84} \\ \underline{80} \\ 4 \\ \underline{4} \\ 0 \end{array}$ $4 \times 20 = 80$ $4 \times 1 = 4$	2. $\overset{30}{3}\overline{)96}$ $3 \times 30 = 90$	3. $2\overline{)68}$	4. $6\overline{)66}$
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5.  $2\overline{)86}$

6.  $4\overline{)48}$

7.  $3\overline{)69}$

8.  $4\overline{)84}$

9.  $2\overline{)88}$

10.  $3\overline{)93}$

11.  $7\overline{)77}$

12.  $3\overline{)36}$

13.  $4\overline{)88}$

14.  $2\overline{)84}$

# Using Multiplication to Divide

Find the quotient and the remainder.

$$\begin{array}{r} 5 \text{ R } 3 \\ 6 \overline{)33} \\ \underline{30} \phantom{0} \\ 3 \end{array}$$

←  $6 \times 5$

$$\begin{array}{r} 7 \\ 9 \overline{)68} \\ \underline{63} \phantom{0} \\ 5 \end{array}$$

←  $9 \times 7$

$$3 \overline{)20}$$

$$7 \overline{)38}$$

$$4 \overline{)15}$$

$$8 \overline{)59}$$

$$2 \overline{)19}$$

$$5 \overline{)42}$$

$$8 \overline{)30}$$

$$4 \overline{)30}$$

$$7 \overline{)67}$$

$$9 \overline{)53}$$

$$6 \overline{)50}$$

$$5 \overline{)36}$$

## Practice

Solve. Show your work.

- Sixteen contestants are entered in each of the 8 divisions of the tournament. How many have entered the tournament?
- The temperature in the electric furnace is  $875^{\circ}\text{C}$ . When it cools  $180^{\circ}$ , Professor O'Day will open it. At what temperature will it be then?
- Curtis has to bicycle 1.8 km to visit Luke. From Luke's to Fran's it is 2.2 km. From Fran's to Jeremy's it is 1.7 km. How far must Curtis bicycle to visit all three friends?
- The 63 student visitors from Mexico are to be carried from the airport in 9 vans. The same number are to be carried in each of the vans. How many should each van carry?
- An excursion fare to Ireland is \$435 return. Mr. O'Leary bought 17 seats for his travel agency. What did this cost?
- A full 747 airliner can carry 428 passengers. The smaller 727 carries only 144. How many more people can the 747 carry?

## Sharing Tens

Divide.

1. $\overset{30}{2}\overline{)60}$ $2 \times 3 \text{ tens} = 6 \text{ tens}$	2. $3\overline{)90}$ $3 \times \underline{\hspace{1cm}} \text{ tens} = 9 \text{ tens}$	3. $3\overline{)60}$	4. $6\overline{)60}$
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5.  $7\overline{)70}$

6.  $4\overline{)80}$

7.  $5\overline{)50}$

8.  $2\overline{)40}$

9.  $2\overline{)80}$

10.  $3\overline{)90}$

11.  $2\overline{)60}$

12.  $8\overline{)80}$

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## Sharing Tens and Ones

Divide.

1. $\overset{20}{4}\overline{)84}$ $\overset{1}{20} \left] \rightarrow 21$ $\underline{80} \leftarrow 4 \times 20$ $\begin{array}{r} 4 \\ 4 \\ \hline 0 \end{array} \leftarrow 4 \times 1$	2. $\overset{30}{3}\overline{)96}$ $\leftarrow 3 \times 30$	3. $2\overline{)68}$	4. $6\overline{)66}$
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5.  $2\overline{)86}$

6.  $4\overline{)48}$

7.  $3\overline{)69}$

8.  $4\overline{)84}$

9.  $2\overline{)88}$

10.  $3\overline{)93}$

11.  $7\overline{)77}$

12.  $3\overline{)36}$

13.  $4\overline{)88}$

14.  $2\overline{)84}$

# Sharing Hundreds, Tens, and Ones

Divide.

<div> <math display="block">\begin{array}{r} 2 \\ 40 \end{array} \Bigg] \rightarrow 342</math> <math display="block">\begin{array}{r} 300 \\ 2 \overline{)684} \\ \underline{600} \phantom{00} \\ 84 \\ \underline{80} \phantom{00} \\ 4 \\ \underline{4} \phantom{00} \\ 0 \end{array}</math> <div> <math>2 \times 300</math> </div> <div> <math>2 \times 40</math> </div> <div> <math>2 \times 2</math> </div> </div>	<div> <math display="block">\begin{array}{r} 300 \\ 3 \overline{)936} \end{array}</math> <div> <math>3 \times 300</math> </div> </div>	<div> <math display="block">4 \overline{)480}</math> </div>	<div> <math display="block">2 \overline{)286}</math> </div>
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5.  $3 \overline{)366}$
6.  $6 \overline{)660}$
7.  $4 \overline{)844}$
8.  $2 \overline{)842}$
9.  $3 \overline{)693}$

# Regrouping Tens

Divide.

<div> <math display="block">\begin{array}{r} 5 \\ 20 \end{array} \Bigg] \rightarrow 25</math> <math display="block">\begin{array}{r} 30 \\ 3 \overline{)75} \\ \underline{60} \phantom{00} \\ 15 \\ \underline{15} \phantom{00} \\ 0 \end{array}</math> <div> <math>3 \times 20</math> </div> <div> <math>3 \times 5</math> </div> </div>	<div> <math display="block">\begin{array}{r} 40 \\ 2 \overline{)94} \end{array}</math> <div> <math>2 \times 40</math> </div> </div>	<div> <math display="block">4 \overline{)52}</math> </div>	<div> <math display="block">3 \overline{)87}</math> </div>
---	---	--	--

5.  $2 \overline{)56}$
6.  $7 \overline{)98}$
7.  $5 \overline{)70}$
8.  $6 \overline{)84}$
9.  $4 \overline{)72}$



**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} 8.35 \\ - 4.78 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} \$2.18 \\ + 9.75 \\ \hline \end{array}$$

3. 
$$2 \overline{)46}$$

4. 
$$3 \overline{)693}$$

5. 
$$\begin{array}{r} 286 \\ \times 7 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 72 \\ \times 48 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} \$4286 \\ + 5192 \\ \hline \end{array}$$

8. 
$$7 \overline{)84}$$

9. 
$$\begin{array}{r} \$8.62 \\ \times 8 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 402 \\ - 86 \\ \hline \end{array}$$

11.  $57 \div 3$

12.  $17 \times 258$

13.  $76 \div 4$

14.  $2117 - 840$

15.  $(219 - 187) \times 24$

16.  $6 \times (4.7 + 9.3)$

17.  $3 \times 8 \times 9 \times 7$

Solve. Show your work.

18. What is the perimeter of a triangular city block whose sides are 217 m, 421 m, and 364 m?

19. How many eggs are there in 16 dozen?

20. The January blizzard left 78.4 cm of snow in Regina. By the weekend, the level was down to 49.8 cm. How much snow had melted?

21. Each of 6 boys raised the same amount for the project. The total amount was \$96. How much did each boy raise?

22. The inside of the movie theatre was long and narrow. It had 38 rows of seats, but only 8 seats in each row. How many seats were in the theatre?

23. When Mrs. Potts ordered furniture for the school, the price was \$2785. The discount to the school was \$496. How much did the school have to pay?

## A Shorter Form for Division

Divide.

$  \begin{array}{r}  52 \text{ R } 1 \\  7 \overline{)365} \\  \underline{350} \quad \leftarrow 7 \times 50 \\  15 \\  \underline{14} \quad \leftarrow 7 \times 2 \\  1  \end{array}  $	$  \begin{array}{r}  7 \\  6 \overline{)456} \\  \quad \quad \quad \leftarrow 6 \times 70  \end{array}  $	$3. \ 2 \overline{)305}$	$4. \ 3 \overline{)801}$
---	---	--------------------------	--------------------------

$$5. \ 8 \overline{)167}$$

$$6. \ 5 \overline{)438}$$

$$7. \ 7 \overline{)125}$$

$$8. \ 4 \overline{)236}$$

$$9. \ 9 \overline{)350}$$

$$10. \ 8 \overline{)428}$$

$$11. \ 4 \overline{)104}$$

$$12. \ 3 \overline{)456}$$

$$13. \ 5 \overline{)285}$$

$$14. \ 6 \overline{)839}$$

## Practice

Solve. Show your work.

- Yuri's scores on 7 tests totalled 595 points. What was his average score?
- Each train ticket costs \$42. The club needs 27 tickets. How much will they cost?
- The restaurant spent \$2348 for labor, \$1941 for food, and \$3728 for other expenses this month. What was its total cost?
- Judd began his jewellery project with 76.8 cm of silver wire. There were 57.9 cm when he finished. How much wire did he use?
- A cucumber is 20.9 cm long. Yesterday it was 17.6 cm long. How much did it grow in one day?
- When 516 school children are divided as evenly as possible into 8 groups, how many will each group have?

**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} 3.64 \\ + 7.28 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 60 \\ \times 7 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} \$11.94 \\ - 3.27 \\ \hline \end{array}$$

4. 
$$4 \overline{)416}$$

5. 
$$\begin{array}{r} 648 \\ \times 27 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 803 \\ - 75 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 2184 \\ 906 \\ + 1375 \\ \hline \end{array}$$

8. 
$$4 \overline{)268}$$

9. 
$$8 \overline{)215}$$

10. 
$$\begin{array}{r} 7.8 \\ - 2.9 \\ \hline \end{array}$$

11.  $420 \div 7$

12.  $83 \times 41$

13.  $\$621 + \$842 + \$917$

14.  $4.73 - 2.68$

15.  $2 \times 8 \times 40$

16.  $416 \div (2.3 + 4.7)$

Solve. Show your work.

17. Ariana and her friend are going on a ski trip. Each will rent equipment for \$7.95, buy lift tickets for \$12.50, and pay driving costs of \$8.55. What will the trip cost each girl?

18. Mrs. Diamantopoulos baked 350 pastries. She wrapped 8 to a paper plate for the bake sale. How many plates did she fill?

19. The petition had 315 pages with 32 names on each page. How many names were on the petition?

20. The card has a length of 7.5 cm and a width of 5.2 cm. What is its perimeter?

21. At noon the temperature was  $31.3^{\circ}\text{C}$ . By evening it was  $27.6^{\circ}\text{C}$ . How much did it drop?

22. The children lined up in 7 rows of 45 each. How many children were there?

## Small Amounts

Would you measure length, capacity, mass, or time?

1. How much cough syrup is in a spoon? <i>capacity</i>	2. How light is a maple leaf?	3. How long is the beak of a chicken?
4. How long does it take to fall to the ground?	5. How much water is in an eye dropper?	6. How much ribbon is on a spool?
7. How far does a snail crawl?	8. How long does it take to start a car?	9. How much tea is in a tea bag?
10. How heavy is a bee?	11. How far does a bee travel?	12. How much honey is in a bee hive?
13. How long is a TV commercial?	14. How thin is a human hair?	15. How much of a load is the truck carrying?

## Units of Time

Complete .

1. 1 min = <u>60</u> s 1 h = <u>60</u> min 1 d = <u>24</u> h 1 week = <u>7</u> d 1 year = <u>365</u> d	2. 7 min = ____ s 4. 2 h 8 min = ____ min 6. 100 s = ____ min ____ s	3. 400 d = ____ year ____ d 5. 50 h = ____ d ____ h 7. 3 weeks 2 d = ____ d
--	--	---

- |                               |                              |
|-------------------------------|------------------------------|
| 8. 3 h = ____ min             | 9. 4 d = ____ h              |
| 10. 150 s = ____ min ____ s   | 11. 10 weeks = ____ d        |
| 12. 2 d 12 h = ____ h         | 13. 15 d = ____ weeks ____ d |
| 14. 130 min = ____ h ____ min | 15. 30 h = ____ d ____ h     |
| 16. 4 weeks 3 d = ____ d      | 17. 2 years = ____ d         |



## The 24-Hour Clock

What would a 12-hour clock show for

1. 20:30? 8:30 p.m.	2. 06:15? _____ :15	3. 22:00?
4. 01:30?	5. 15:15?	6. 12:45?
7. 4 h later than 13:00?	8. 2 h 30 min earlier than 10:45?	9. 5 h 40 min later than 09:00?

What would a 24-hour clock show for

10. 9:30 a.m.? 09:30	11. 7 p.m.? _____ :00	12. 5:20 p.m.?
13. 9:05 p.m.?	14. 11:45 a.m.?	15. 12:30 a.m.?
16. 4 h later than 1 p.m.?	17. 2 h 30 min earlier than 10:45 a.m.?	18. 5 h 40 min later than 9 a.m.?

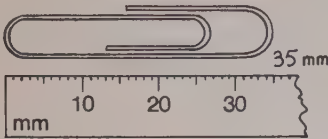



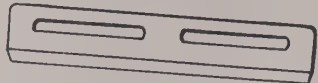

## Practice

Solve. Show your work.

- The ferry boat has been bringing vacationers to the island. On two trips it was full with 280 passengers. On the third trip it had 217 passengers. How many did it carry in all?
- The planners for the political rally expected 7500 people. Actually, 1785 fewer than this attended. How many came to the rally?
- The car rental people charged Mr. Berend 9¢/km. He drove 576 km. How much did this cost?
- Pete's group began its hike at 10:15 a.m. The boys finished 2 h 20 min later. What time was it then?
- Aunt Matty left \$588 to her 3 nieces. They shared it equally. How much did each receive?
- The plant's growth in the past 2 d was 4.19 cm and 6.78 cm. What was the total growth?

## Length in Millimetres

Measure each in millimetres.

<p>1. </p>	<p>2.  Use a ruler.</p>	<p>3. </p>
<p>4. </p>	<p>5. </p>	<p>6. </p>

Choose the best estimate for

7. the diameter of a penny.

35 mm   20 mm   10 mm

8. the height of an ant.

1 mm   1 cm   15 mm

9. length of a front tooth.

1 mm   1 cm   100 mm

10. thickness of your ear lobe.

1 mm   1 cm   5 mm

## Four Units of Length

Which unit, the millimetre, the centimetre, the metre, or the kilometre, is best for measuring

<p>1. the length of a basketball court? metre</p>	<p>2. the distance from Halifax to Fredericton?</p>	<p>3. the thickness of a piece of cardboard?</p>
<p>4. the perimeter of a garden?</p>	<p>5. the length of an envelope?</p>	<p>6. the length of a dog's tail?</p>
<p>7. the length of the eye of a needle?</p>	<p>8. the length of a train ride?</p>	<p>9. the length of a train?</p>

Choose the best estimate for

10. the length of a ski.

150 mm   150 cm   150 m

11. the length of a piece of chalk.

80 mm   80 cm   80 km

12. the height of a ceiling.

3 cm   3 m   3 km

13. the length of a country road.

10 mm   10 m   10 km

## Practice

Would you measure length, capacity, mass, or time to find

1. how much milk a kitten drinks?
2. how heavy a safety pin is?
3. how long to make a necklace?
4. the thickness of a finger?
5. the amount of water a sponge holds?
6. how long between blinks of an eye?

Complete.

7. 2 min = \_\_\_\_ s
8. 30 h = \_\_\_\_ d \_\_\_\_ h
9. 48 months = \_\_\_\_ years
10. 7 weeks = \_\_\_\_ d
11. 30 d = \_\_\_\_ weeks \_\_\_\_ d
12. 180 min = \_\_\_\_ h
13. 3 d 8 h = \_\_\_\_ h
14. 1 year = \_\_\_\_ d

What would a 12-hour clock show for

15. 03:00?
16. 20:10?
17. 14:40?
18. 2 h 30 min later than 08:15?
19. 4 h 20 min earlier than 13:40?
20. 5 h 25 min earlier than 22:50?

What would a 24-hour clock show for

21. 12 noon?
22. 7:15 a.m.?
23. 9:30 p.m.?
24. 3 h later than 5:10 p.m.?
25. 2 h 15 min earlier than 1:30 p.m.?
26. 6 h 10 min later than 10:20 a.m.?

Use a ruler. Measure each in millimetres.

27. \_\_\_\_\_
28. \_\_\_\_\_

Which unit, the millimetre, the centimetre, the metre, or the kilometre, is best for measuring

29. the distance travelled by a hot-air balloon?
30. the length of an eyelash?
31. the height of a telephone pole?

Choose the best estimate for

32. the thickness of pencil lead.  

1 mm   5 mm   1 cm
33. the length of a hockey stick.  

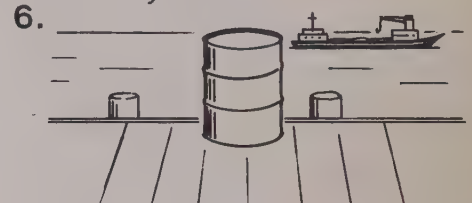
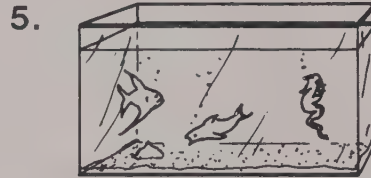
2 cm   2 m   2 km
34. the height of a foot stool.  

40 mm   40 cm   1 m
35. the width of a shoe.  

8 mm   8 cm   80 cm

## Capacity in Millilitres and Litres

Which unit, the millilitre or the litre, is better for measuring the capacity of the following?



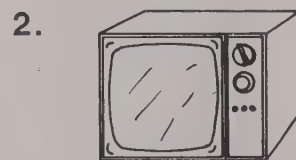
Use mL or L to complete each sentence.

7. Justin squeezed 30 \_\_\_\_ of juice from the orange.

8. Pamela added 2 \_\_\_\_ of antifreeze to the car radiator.

## Mass in Grams and Kilograms

Which unit, the gram or the kilogram, is better for measuring the mass of the following?



Use g or kg to complete each sentence.

7. The box held 300 \_\_\_\_ of cereal.

8. Al's goal was to lose 1 \_\_\_\_ each week.



**Millilitres and Litres**

Complete.

1. 5 L 35 mL = <u>5035</u> mL 1 L = 1000 mL	2. 7895 mL = _____ L _____ mL 1000 mL = 1 L
3. 3 L = _____ mL	4. 6450 mL = _____ L _____ mL

5. 8 L = \_\_\_\_\_ mL      6. 4000 mL = \_\_\_\_\_ L
7. 9000 mL = \_\_\_\_\_ L      8. 2 L = \_\_\_\_\_ mL
9. 3500 mL = \_\_\_\_\_ L \_\_\_\_\_ mL      10. 4 L 5 mL = \_\_\_\_\_ mL
11. 5 L 350 mL = \_\_\_\_\_ mL      12. 1950 mL = \_\_\_\_\_ L \_\_\_\_\_ mL
13. 2050 mL = \_\_\_\_\_ L \_\_\_\_\_ mL      14. 3 L 675 mL = \_\_\_\_\_ mL

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**Grams and Kilograms**

Complete.

1. 6208 g = <u>6</u> kg <u>208</u> g 1000 g = 1 kg	2. 4 kg 500 g = _____ g 1 kg = 1000 g
3. 2000 g = _____ kg	4. 7 kg 50 g = _____ g

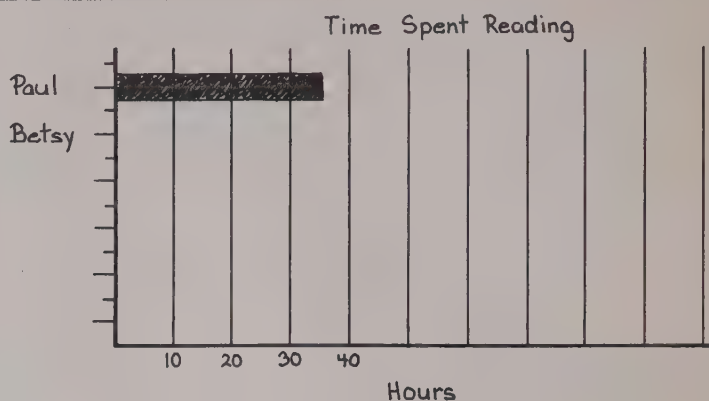
5. 5000 g = \_\_\_\_\_ kg      6. 3 kg = \_\_\_\_\_ g
7. 6 kg = \_\_\_\_\_ g      8. 9000 g = \_\_\_\_\_ kg
9. 1 kg 900 g = \_\_\_\_\_ g      10. 4004 g = \_\_\_\_\_ kg \_\_\_\_\_ g
11. 3205 g = \_\_\_\_\_ kg \_\_\_\_\_ g      12. 8 kg 25 g = \_\_\_\_\_ g
13. 5 kg 750 g = \_\_\_\_\_ g      14. 2075 g = \_\_\_\_\_ kg \_\_\_\_\_ g

## Working with Graphs

Draw a graph for the information in each exercise.

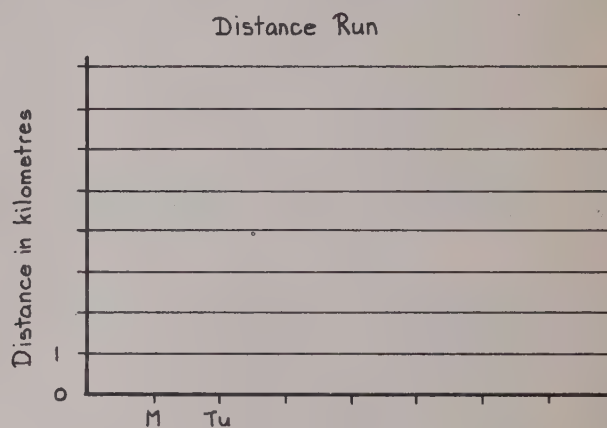
### 1. Time spent reading in one month

Paul	35 h
Betsy	80 h
Matthew	70 h
Edward	85 h
Joe	60 h
Marie	70 h



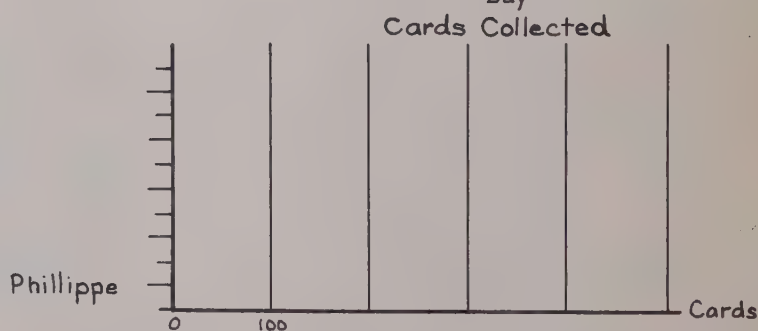
### 2. Distance run by Jan each day

Monday	4 km
Tuesday	6 km
Wednesday	8 km
Thursday	7 km
Friday	6 km
Saturday	5 km
Sunday	6 km



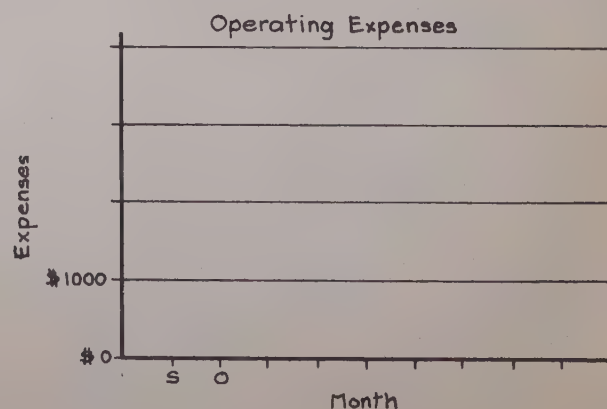
### 3. Number of hockey cards collected

Francois	200
Jean	350
Rene	325
Jacque	450
Phillippe	275



### 4. Operating expenses during school year

Sept.	\$2000	Feb.	\$2250
Oct.	\$3250	March	\$3000
Nov.	\$3500	April	\$2250
Dec.	\$1500	May	\$1750
Jan.	\$3750	June	\$2000



**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} 13.78 \\ - 4.92 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 231 \\ 868 \\ + 914 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 5.8 \\ \times 6 \\ \hline \end{array}$$

4.  $2\overline{)846}$

5.  $7\overline{)420}$

6. 
$$\begin{array}{r} 728 \\ \times 14 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 1600 \\ - 908 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} \$ 2.07 \\ 18.21 \\ + 49.65 \\ \hline \end{array}$$

9.  $8\overline{)712}$

10. 
$$\begin{array}{r} 0.7 \\ \times 9 \\ \hline \end{array}$$

11.  $(627 - 483) \times 26$

12.  $(897 - 147) \div 6$

13.  $\$10.66 - \$7.82$

14.  $284 + 815 + 76$

15.  $41.28 + 16.94$

16.  $42 \times 863$

Solve. Show your work.

17. The large fuel tank holds 8235 L. The smaller one holds 1075 L. Together, how much do they hold?

18. The total mass of the 4 hogs on the pickup truck is 772 kg. What is their average mass?

19. The whole trip will be 1000 km. One day 274 km were covered. The next day 317 km were travelled. How many kilometres remain?

20. Suzy watches the baker prepare muffins. Each pan contains 48 muffins. The pans are stacked 18 high on racks. How many muffins are on the racks?

21. Six persons paint a house. They are paid \$500. The supplies cost \$50 and the rest they share equally. How much does each person get?

22. The first time the mouse went through the maze, it took 42.4 s. The tenth time through, it took 15.8 s. By how much had the mouse improved its time?

## Equivalent Fractions for One-Half

Use  $\frac{1}{2}$ ,  $\frac{2}{4}$ , or  $\frac{5}{10}$  to write the numeral that matches each picture best.

1.	2.	3.	4.
5.	6.	7.	8.
9.	10.	11.	12.

## Decimal Names for One-Half

Write each of these as a decimal

showing tenths.	
1. $3\frac{1}{2}$ 3.5	2. 3.50
showing hundredths.	
6. $2\frac{1}{2}$ 2.50	7. 0.5

3.  $6\frac{1}{2}$

4. 0.50

5.  $\frac{1}{2}$

8. 1.5

9.  $3\frac{1}{2}$

10.  $\frac{1}{2}$

Write each of these using the fraction  $\frac{1}{2}$ .

11. 16.5

12. 0.50

13. 4.5

14. 1.50

15. 9.50



## Fourths and Quarters

Complete each chart.

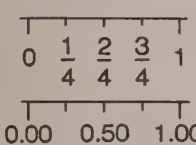
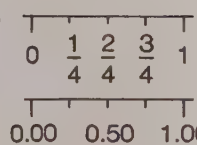
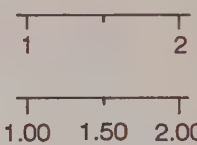
<u>dollars</u>   <u>quarters</u>   <u>value</u>	<u>dollars</u>   <u>quarters</u>   <u>value</u>	<u>dollars</u>   <u>quarters</u>   <u>value</u>
1. 1          2          \$1.50	2. 2          1          \$2.	3. _____ \$0.75
<u>fraction (fourths)</u>   <u>decimal</u>	<u>fraction (fourths)</u>   <u>decimal</u>	<u>fraction (fourths)</u>   <u>decimal</u>
4. $1\frac{2}{4}$ 1.50	5. $3\frac{3}{4}$ 3.	6. _____ 0.25

<u>dollars</u>   <u>quarters</u>   <u>value</u>	<u>dollars</u>   <u>quarters</u>   <u>value</u>	<u>dollars</u>   <u>quarters</u>   <u>value</u>
7. 1          3          _____	8. _____ \$0.25	9. 0          2          _____
<u>dollars</u>   <u>quarters</u>   <u>value</u>	<u>dollars</u>   <u>quarters</u>   <u>value</u>	<u>dollars</u>   <u>quarters</u>   <u>value</u>
10. _____ \$3.75	11. 1          1          _____	12. _____ \$2.50
<u>fraction (fourths)</u>   <u>decimal</u>	<u>fraction (fourths)</u>   <u>decimal</u>	<u>fraction (fourths)</u>   <u>decimal</u>
13. _____ 2.50	14. $\frac{3}{4}$ _____	15. _____ 4.25

SPM4/U13/298-299

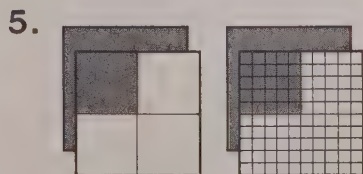
## Equivalent Fractions and Decimals

Write a decimal or fraction to complete each sentence.

1.  $\frac{2}{4} =$ <u>0.50</u>	2.  $\frac{1}{4} =$ <u>0.</u>	3.  1.50 = _____
--	--	---



$$\frac{1}{2} = \underline{\hspace{2cm}}$$



$$1\frac{1}{4} = \underline{\hspace{2cm}}$$



$$\frac{2}{4} = \underline{\hspace{2cm}}$$

7.  $2\frac{3}{10} =$  \_\_\_\_\_

8.  $1\frac{3}{4} =$  \_\_\_\_\_

9. 2.25 = \_\_\_\_\_

10. 0.75 = \_\_\_\_\_

11. 6.50 = \_\_\_\_\_

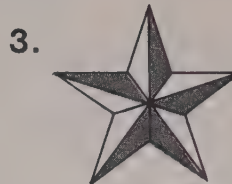
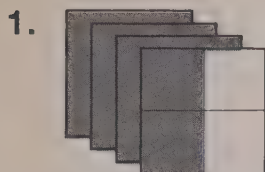
12. 0.5 = \_\_\_\_\_

13.  $4\frac{1}{4} =$  \_\_\_\_\_

14. 4.75 = \_\_\_\_\_

## Practice

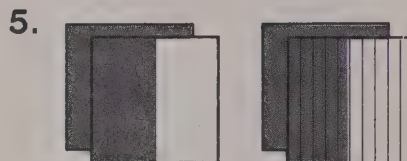
Use  $\frac{1}{2}$ ,  $\frac{2}{4}$ , or  $\frac{5}{10}$  to write the numeral that matches each picture best.



Write the decimal that matches the picture and completes the sentence.



$$\frac{3}{4} = \underline{\hspace{2cm}}$$



$$1\frac{1}{2} = \underline{\hspace{2cm}}$$

Write each of these as a decimal showing tenths.

6.  $3\frac{1}{2}$

7.  $\frac{3}{10}$

8.  $1\frac{6}{10}$

9.  $\frac{1}{2}$

Write each of these as a decimal showing hundredths.

10.  $4\frac{1}{2}$

11.  $1\frac{3}{4}$

12. 2.5

13.  $\frac{1}{4}$

Write a fraction to complete each sentence.  
Use fourths or one-half when possible.

14. 5.50 = \_\_\_\_\_

15. 3.25 = \_\_\_\_\_

16. 0.9 = \_\_\_\_\_

17. 1.75 = \_\_\_\_\_

18. \$0.50 is \_\_\_\_\_ the  
value of 1 dollar.

19. The value of 3 quarters is \_\_\_\_\_  
the value of 1 dollar.

Complete the chart.

	<u>Bills and Coins</u>	<u>Value</u>
20.	2 dollars and 3 quarters	_____
21.	___ dollar and ___ quarters	<u>\$1.50</u>
22.	3 dollars and 1 quarter	_____
23.	___ dollars and ___ quarters	<u>\$0.75</u>
24.	5 dollars and 2 quarters	_____
25.	___ dollars and ___ quarter	<u>\$2.25</u>

## Comparing and Ordering Fractions

Use  $>$  or  $<$  to make a true statement.

$\overset{0.50}{1.} \frac{2}{4} > \overset{0.10}{\frac{1}{10}}$	$\overset{0.50}{2.} \frac{1}{2} \text{ — } \overset{0.75}{\frac{3}{4}}$	$3. \frac{1}{4} \text{ — } \frac{1}{2}$	$4. \frac{6}{10} \text{ — } \frac{9}{10}$
---	---	---	---

$$5. \frac{6}{10} \text{ — } \frac{3}{4}$$

$$6. \frac{1}{2} \text{ — } \frac{9}{10}$$

$$7. \frac{2}{4} \text{ — } \frac{2}{10}$$

$$8. \frac{3}{4} \text{ — } \frac{2}{4}$$

$$9. \frac{5}{10} \text{ — } \frac{3}{4}$$

List in order from least to greatest.

$$10. \frac{1}{2}, \frac{3}{4}, \frac{1}{4}, \frac{1}{10}$$




$$11. \frac{2}{4}, \frac{1}{10}, \frac{4}{10}, \frac{9}{10}$$

$$12. \frac{6}{10}, \frac{1}{2}, \frac{1}{4}, \frac{2}{10}$$

$$13. \frac{3}{4}, \frac{9}{10}, \frac{7}{10}, \frac{1}{2}$$

## Fraction Names for 1

Draw a shape for 1

1. if  is $\frac{1}{4}$ .	2. if  is $\frac{1}{4}$ .	3. if  is $\frac{1}{10}$ .
--	--	---

$$4. \text{ if } \img alt="semicircle" data-bbox="126 671 166 691"/> \text{ is } \frac{1}{2}.$$

$$5. \text{ if } \img alt="triangle" data-bbox="426 666 471 691"/> \text{ is } \frac{1}{4}.$$

$$6. \text{ if } \img alt="triangle" data-bbox="731 666 766 691"/> \text{ is } \frac{1}{10}.$$

$$7. \text{ if } \img alt="rectangle" data-bbox="126 814 166 834"/> \text{ is } \frac{1}{4}.$$

$$8. \text{ if } \img alt="triangle" data-bbox="431 801 466 834"/> \text{ is } \frac{1}{2}.$$

$$9. \text{ if } \img alt="sector" data-bbox="716 814 776 851"/> \text{ is } \frac{1}{4}.$$

Adding Fractions

Add. Check by using decimals.

<div>1. <math>1\frac{2}{10}</math></div> <div><math>3\frac{7}{10}</math></div> <hr/> <div><math>4\frac{9}{10}</math></div>	<div>2. <math>2\frac{1}{2}</math></div> <div><math>3\frac{1}{2}</math></div> <hr/>	<div>3. <math>3\frac{2}{4}</math></div> <div><math>5\frac{1}{4}</math></div> <hr/>	<div>4. <math>2 + 2\frac{1}{4}</math></div>
--	--	--	---

<div>5. <math>\frac{1}{4}</math></div> <div><math>\frac{2}{4}</math></div> <hr/>	<div>6. <math>1\frac{3}{10}</math></div> <div><math>4\frac{7}{10}</math></div> <hr/>	<div>7. <math>5\frac{1}{2}</math></div> <div><math>2</math></div> <hr/>	<div>8. <math>2\frac{5}{10}</math></div> <div><math>4\frac{1}{10}</math></div> <hr/>	<div>9. <math>2\frac{1}{4}</math></div> <div><math>6\frac{1}{4}</math></div> <hr/>
--	--	---	--	--

10. $6 + 1\frac{3}{4}$	11. $8\frac{1}{10} + 4\frac{2}{10}$	12. $\frac{1}{2} + \frac{1}{2}$
13. $7\frac{8}{10} + 3\frac{2}{10}$	14. $2\frac{5}{10} + 1\frac{5}{10}$	15. $4\frac{3}{4} + 3\frac{1}{4}$

Subtracting Fractions

Subtract. Check by using decimals.

<div>1. <math>6\frac{4}{10}</math></div> <div><math>3\frac{1}{10}</math></div> <hr/> <div><math>3\frac{3}{10}</math></div>	<div>2. <math>6</math></div> <div><math>4\frac{3}{10}</math></div> <hr/>	<div>3. <math>6\frac{2}{10}</math></div> <div><math>1\frac{1}{10}</math></div> <hr/>	<div>4. <math>5\frac{2}{4} - 1\frac{1}{4}</math></div>
--	--	--	--

<div>5. <math>6</math></div> <div><math>5\frac{3}{4}</math></div> <hr/>	<div>6. <math>8\frac{8}{10}</math></div> <div><math>3\frac{3}{10}</math></div> <hr/>	<div>7. <math>2</math></div> <div><math>\frac{6}{10}</math></div> <hr/>	<div>8. <math>3\frac{3}{4}</math></div> <div><math>1</math></div> <hr/>	<div>9. <math>2\frac{1}{2}</math></div> <div><math>1\frac{1}{2}</math></div> <hr/>
---	--	---	---	--

10. $5\frac{9}{10} - 4\frac{1}{10}$	11. $6\frac{3}{4} - 2\frac{1}{4}$	12. $6 - 1\frac{1}{4}$
13. $4\frac{3}{10} - 3$	14. $4 - \frac{1}{2}$	15. $7 - 5\frac{5}{10}$



**Practice**

Perform the indicated operation.

1. 
$$\begin{array}{r} 3\frac{1}{4} \\ + 2\frac{2}{4} \\ \hline \end{array}$$

2. 
$$\begin{array}{r} \$4.37 \\ \times 8 \\ \hline \end{array}$$

3. 
$$7 \overline{)357}$$

4. 
$$\begin{array}{r} 4\frac{7}{10} \\ - 1\frac{3}{10} \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 63.21 \\ + 19.48 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 3.9 \\ \times 5 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 5 \\ - 3\frac{1}{2} \\ \hline \end{array}$$

8. 
$$3 \overline{)\$915}$$

9. 
$$\begin{array}{r} 462 \\ \times 33 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} \$14.86 \\ - 7.93 \\ \hline \end{array}$$

11.  $3\frac{3}{10} + 6\frac{2}{10}$

12.  $279 \div 9$

13.  $406 - 27$

14.  $(314 - 281) \times 35$

15.  $14 \times \$8.06$

16.  $614 + 28 + 1914$

Solve. Show your work.

17. Mr. Derrin's garden is 8 m wide and 14 m long. How many metres of fence will be needed to go around it?

19. Mill Village has 3 mail routes. One has 128 boxes. Another has 273 boxes. The third has 185 boxes. Altogether, how many mail boxes are there in Mill Village?

21. 645 copies of the school newspaper are to be divided equally among 3 locations. How many will each have?

18. A tweed material Mrs. Brun likes costs \$12 per square metre. She needs 2.6 m<sup>2</sup>. How much will this cost?

20. Pauline is deciding between a 10-speed and a 5-speed bicycle. The 10-speed costs \$136.65. The 5-speed is \$41.95 less. How much does the 5-speed bicycle cost?

22. The feedstore has a stack of 180 bags of feed. Each bag holds 25 kg. How many kilograms of feed are there in all?

# Checking Up -- Addition, Subtraction, Multiplication

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 53 \\ + 24 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 957 \\ - 642 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 60 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 63 \\ - 38 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 36 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 467 \\ + 371 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 670 \\ - 276 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 85 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 359 \\ + 168 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 900 \\ - 472 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 400 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 1274 \\ + 1789 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 748 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 6614 \\ - 1936 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 27 \\ \times 60 \\ \hline \end{array}$$

$$\begin{array}{r} 16. \quad \$6.84 \\ + 5.17 \\ \hline \end{array}$$

$$\begin{array}{r} 17. \quad \$2.85 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 18. \quad \$17.32 \\ - 8.37 \\ \hline \end{array}$$

$$\begin{array}{r} 19. \quad \$46.00 \\ - 36.84 \\ \hline \end{array}$$

$$\begin{array}{r} 20. \quad \$28.57 \\ + 44.96 \\ \hline \end{array}$$

$$\begin{array}{r} 21. \quad 47 \\ \times 58 \\ \hline \end{array}$$

$$\begin{array}{r} 22. \quad 39.5 \\ + 57.5 \\ \hline \end{array}$$

$$\begin{array}{r} 23. \quad 1425 \\ 938 \\ + 2647 \\ \hline \end{array}$$

$$\begin{array}{r} 24. \quad 20.2 \\ - 1.9 \\ \hline \end{array}$$

$$\begin{array}{r} 25. \quad 297 \\ \times 39 \\ \hline \end{array}$$

Solve. Show your work.

26. Hayley's Store ordered 75 cartons of sugar with 8 bags in each carton. How many bags of sugar did it order?

27. The Fire Department reported 2032 calls for the year, of which 475 were false alarms. How many calls were not false alarms?

28. Meredith paid \$32.50, \$26.75, and \$19.45 to the three part-time helpers. How much did she pay the part-time helpers in all?

29. The building plans show 24 groups of new houses with 16 houses in each group. How many new houses do the building plans show?

**Checking Up -- Computation**

Perform the indicated operation.

1. 
$$\begin{array}{r} 513 \\ + 145 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 84 \\ \times 6 \\ \hline \end{array}$$

3. 
$$3 \overline{)639}$$

4. 
$$\begin{array}{r} 698 \\ - 462 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 748 \\ \times 3 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 3864 \\ + 769 \\ \hline \end{array}$$

7. 
$$4 \overline{)92}$$

8. 
$$\begin{array}{r} 25.9 \\ \times 8 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} \$67.59 \\ + 24.89 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 2000 \\ - 1571 \\ \hline \end{array}$$

11. 
$$\begin{array}{r} 96 \\ \times 70 \\ \hline \end{array}$$

12. 
$$\begin{array}{r} 336.2 \\ - 86.9 \\ \hline \end{array}$$

13. 
$$\begin{array}{r} \$6.98 \\ \times 5 \\ \hline \end{array}$$

14. 
$$7 \overline{)252}$$

15. 
$$\begin{array}{r} 75 \\ \times 94 \\ \hline \end{array}$$

16.  $\$90.63 - \$53.96$

17.  $162 \div 6$

18.  $6 \times 6 \times 7$

19.  $528 \div 8$

20.  $74 \times 375$

21.  $420.7 + 82.3 + 99.2$

Solve. Show your work.

22. Phillip paid the \$12.99 bill with a \$20 bill. How much change did he receive?

23. Laurie placed 125 apples in 5 bags with the same number in each bag. How many were in each bag?

24. Ted filled 38 cartons with two dozen eggs each. How many eggs were in the cartons?

25. The grocery items cost \$2.89, \$0.77, and \$3.89. How much did the three items cost in all?

## Checking Up -- Numeration

Write in standard form.

1. sixty-nine thousand forty-one
2. seven and five-eighths
3.  $70\,000 + 800 + 20$
4. forty-eight and seventy-five hundredths
5. three-fifths
6. two and eight-hundredths

Use  $>$ ,  $<$ , or  $=$  to make a true statement.

7.  $77\,535$  \_\_\_\_  $77\,355$
8.  $206\,370$  \_\_\_\_  $263\,070$
9.  $689\,768$  \_\_\_\_  $689\,786$
10.  $4.3$  \_\_\_\_  $4.30$
11.  $17.08$  \_\_\_\_  $17.74$
12.  $29.3$  \_\_\_\_  $29.2$
13.  $\frac{1}{2}$  \_\_\_\_  $\frac{2}{3}$
14.  $1$  \_\_\_\_  $\frac{5}{5}$
15.  $\frac{3}{4}$  \_\_\_\_  $0.76$



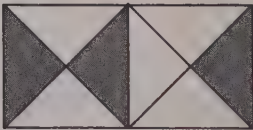
List in order from least to greatest.

16. 3.85, 3.08, 3.50, 38.5, 3.58, 3.80
17.  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{2}{3}$ ,  $\frac{3}{4}$ ,  $\frac{2}{5}$ ,  $\frac{3}{5}$ ,  $\frac{4}{5}$
18. 108 909, 180 980, 108 908, 109 801, 108 918, 108 009

Round to the

19. nearest ten: 3675
20. nearest thousand: 29 704
21. nearest hundred: 6845
22. nearest whole number: 23.18

Write a fraction to show how much is shaded.

23. 
24. 
25. 

Write a decimal to show how much is shaded.

26. 
27. 
28. 



## Checking Up -- Measurement

Complete.

1. 2 km = \_\_\_\_\_ m
2. 128 cm = \_\_\_\_\_ m \_\_\_\_\_ cm
3. 2 L 89 mL = \_\_\_\_\_ mL
4. 6280 mL = \_\_\_\_\_ L \_\_\_\_\_ mL
5. 3000 g = \_\_\_\_\_ kg
6. 1 kg 14 g = \_\_\_\_\_ g
7. 4 m = \_\_\_\_\_ cm
8. 1 h 10 min = \_\_\_\_\_ min
9. 4 min 20 s = \_\_\_\_\_ s
10. 1 dollar 12 dimes are worth \$\_\_\_\_\_.
11. 3 dollars 5 dimes 17 pennies are worth \$\_\_\_\_\_.
12. 2 dollars 18 dimes 15 pennies are worth \$\_\_\_\_\_.

Which unit of length, the millimetre, the centimetre, the metre, or the kilometre is best for measuring

13. the length of a newborn baby?
14. the width of a baby's fingernail?
15. the distance from your home to the centre of town?
16. the width of a road?

Choose the best estimate for

17. the mass of a pigeon.  

1 g, 1 kg, 10 kg
18. the width of a dime.  

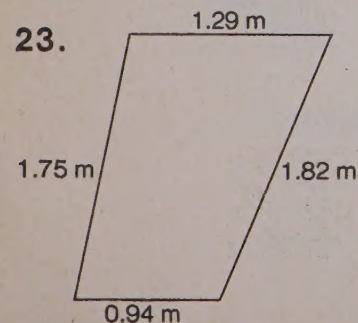
2 mm, 2 cm, 2 m
19. the capacity of a thimble.  

2 L, 20 mL, 2 mL

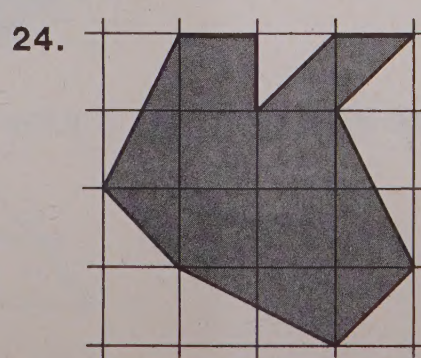
Complete.

20. The mass of my pencil is about 15 \_\_\_\_\_.
21. The school doorway is about 3 \_\_\_\_\_ tall.
22. The orange juice pitcher holds about 2 \_\_\_\_\_ of juice.

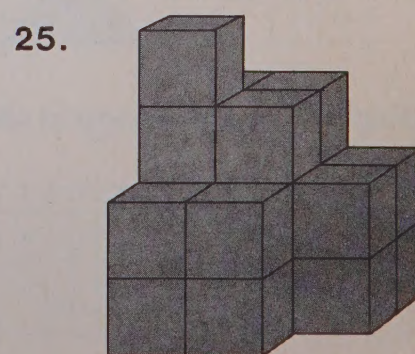
Find the perimeter.



Give the area in square centimetres.



Give the volume in cubic centimetres.

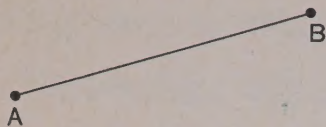




# Checking Up -- Geometry

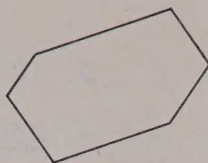
Complete each sentence.

1.


 $\overline{AB}$  is

a \_\_\_\_\_.

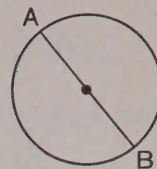
2.



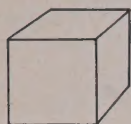
This polygon

is a \_\_\_\_\_.

3.


 $\overline{AB}$  is a \_\_\_\_\_  
of the circle.

4.

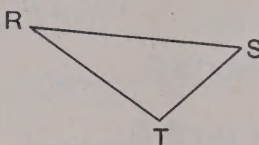


A cube has \_\_\_\_\_ faces.

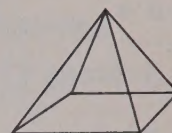
Each has

the shape of a \_\_\_\_\_.

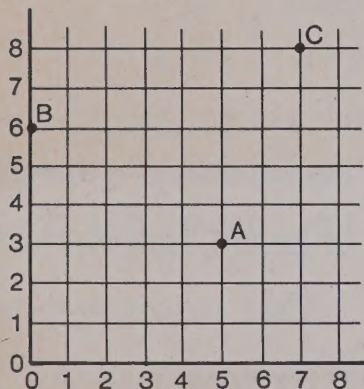
5.

A name for this  
triangle is \_\_\_\_\_.

6.

This pyramid has  
\_\_\_\_\_ edges and  
\_\_\_\_\_ vertices.

Use the grid for Exercises 7-12. Write a number pair for



7. point A.

8. point B.

9. point C.

Show on the grid the point named by

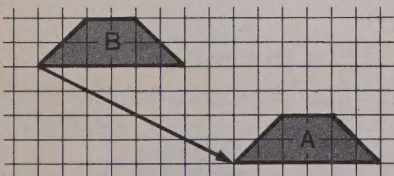
10. (3, 0). Call it D.

11. (1, 4). Call it E.

12. (4, 5). Call it F.

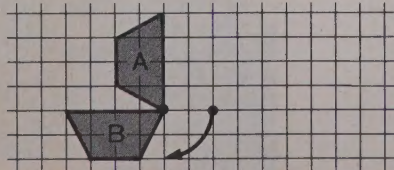
Is shape A the slide image of shape B?

13.



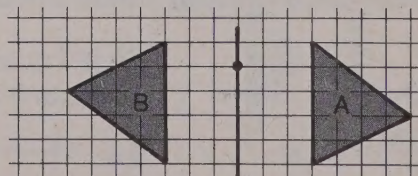
Is shape A the turn image of shape B?

15.



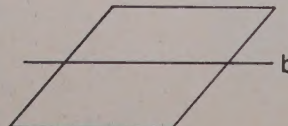
Is shape A the flip image of shape B?

14.



Is line b a line of symmetry?

16.



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